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*Chief Education Officer*
NANCY GOLDEN

# OREGON EDUCATION INVESTMENT BOARD
## Outcomes and Investments Subcommittee

**July 24, 2014**
**2:00pm – 5:00pm**
506 SW Mill Street, Room 710
Meyer Memorial Board Room
Portland, 97201

Members: Dick Withnell, Chair, Pam Curtis, Ron Saxton, Hanna Vaandering, Duncan Wyse

Public call in information:
Dial (888) 204 5984, Code 992939

## AGENDA

**1.0 Subcommittee Welcome & Roll Call**
Dick Withnell, Chair

**2.0 Presentation from Higher Education Coordinating Commission (HECC)**
Ben Cannon, Executive Director, HECC

**3.0 Presentation from STEM Investment Council**
Mark Lewis, STEM Director, OEIB
Jim Piro, Chair, STEM Investment Council

**4.0 Presentation from Best Practices and Student Transitions Subcommittee**
Dr. Yvonne Curtis, Chair, Best Practices and Student Transitions Subcommittee
Hilda Rosselli, Director, College and Career Readiness, OEIB

**5.0 Presentation on Network for Quality Teaching & Learning**
Hilda Rosselli, Director, College and Career Readiness, OEIB
Johnna Timmes, ODE

**6.0 Review of August Work Sessions**
Whitney Grubbs, Chief of Staff, OEIB

**7.0 Public testimony**

**8.0 Adjournment**

*All meetings of the Oregon Education Investment Board are open to the public and will conform to Oregon public meetings laws. The upcoming meeting schedule and materials from past meetings are posted online. A request for an interpreter for the hearing impaired or for accommodations for people with disabilities should be made to Seth Allen at 503-378-8213 or by email at Seth.Allen@das.state.or.us. Requests for accommodation should be made at least 48 hours in advance.*

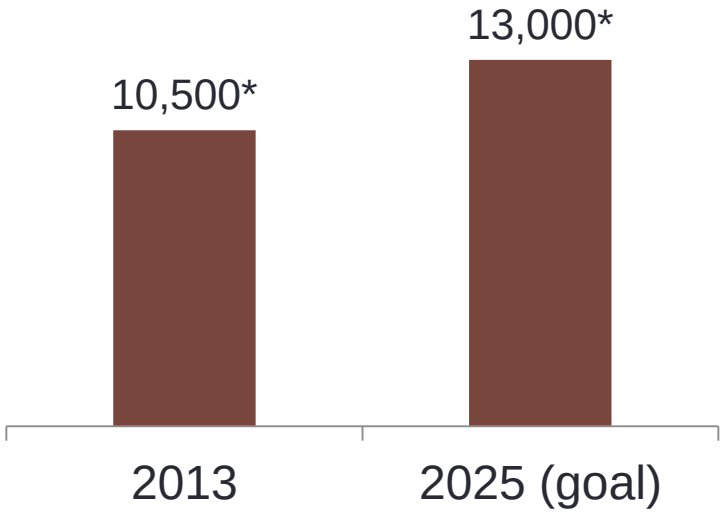
# HIGHER EDUCATION COORDINATING COMMISSION: 2015-17 BUDGET RECOMMENDATIONS

Presentation to OEIB Outcomes & Investment Subcommittee

July 24, 2014

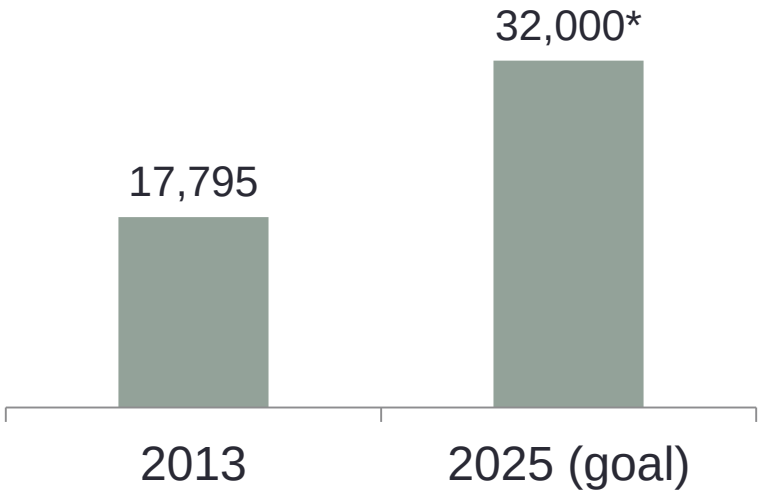
## Upper 40 Gap (young adult/“pipeline”)

BA degrees awarded by Oregon public universities to residents under age 30




## Middle 40 Gap (total adult)

Degrees and certificates awarded by community colleges




*estimate

# Highest Priority Strategies

- Strategy 1:  Productivity

- Strategy 2:  Affordability

# Productivity Strategy

Public universities' graduation (BA) rate: 60.5%

- African-American: 48.4%
- Native American: 50.4%
- Hispanic/Latino: 52.9%
- White: 61.9%

Community colleges' degree completion rate: 19.6%

- African-American: 8.8%
- Hispanic/Latino: 15.8%
- White: 20.1%

Community colleges' certificate completion rate: 42.4%

- Hispanic/Latino: 30.4%
- White: 42.2%

*Sources: OUS 2013 Fact Book, Complete College America State Profile, 2011. Measures are based only on first-time full-time freshmen and do not "credit" for students who transfer to other institutions before receiving certificate/degree.*

# Productivity Strategy

Shift the basis for state funding distributions from enrollment to completion

Provide new resources in order to support the efforts that will need to be undertaken at the campus level.

# Productivity Strategy, Outcomes

## Expected Impact on Key Outcomes

Funding tied to success in all of the following:

- Dual credits
- Success in development education
- Certificates
- Credit-hour progress toward degree
- Associate's degrees
- Bachelor's degrees
- Post-graduation employment/income

# Productivity Strategy, Outcomes

## Effect of Various Investment Levels

Greater institutional investments

- Student Access
- Student Services
- Completion

# Productivity Strategy, Equity

Alignment to Equity Lens

- Additional weighting in funding formula

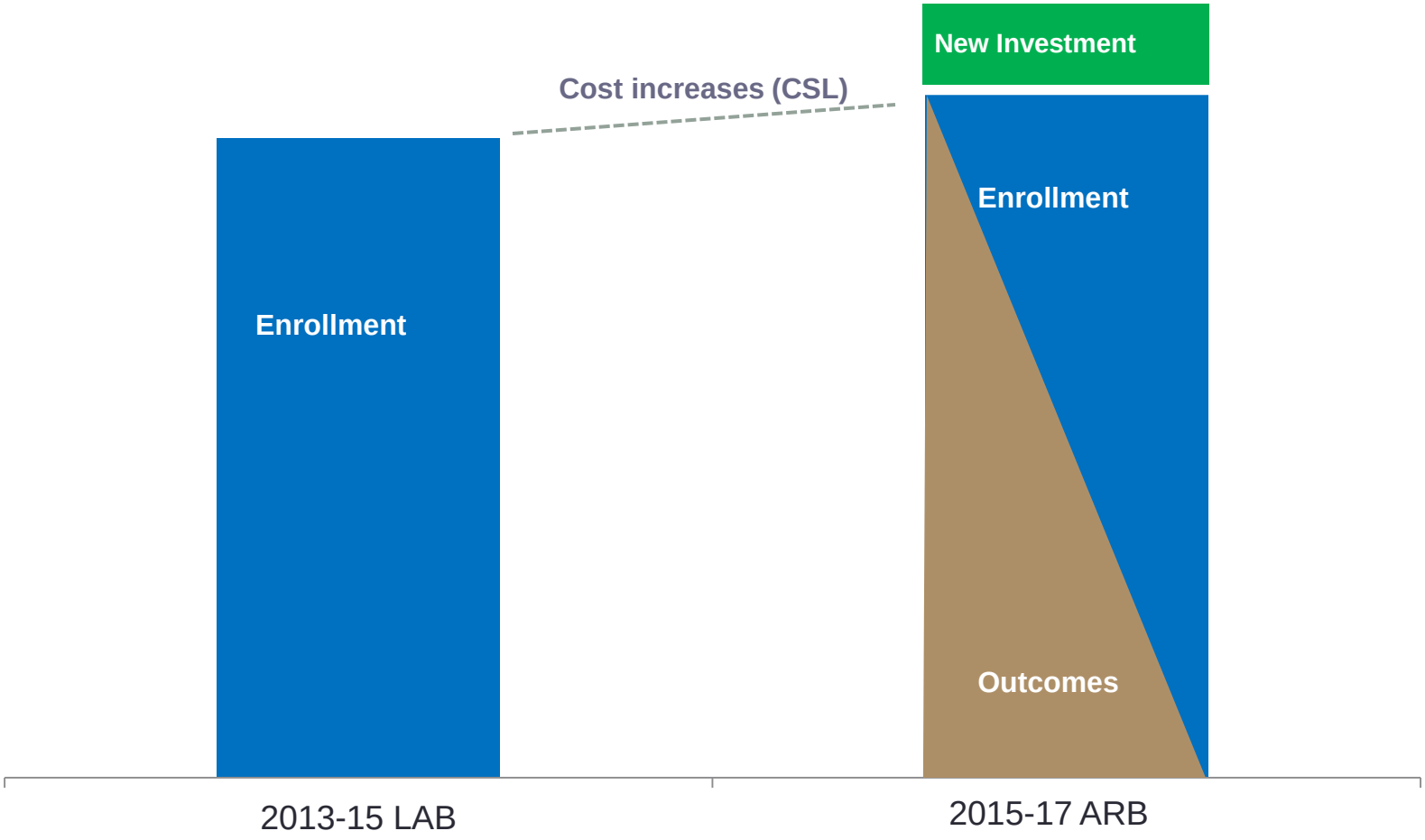
Improved Outcomes for Underserved Students

- Institutional focus on student success

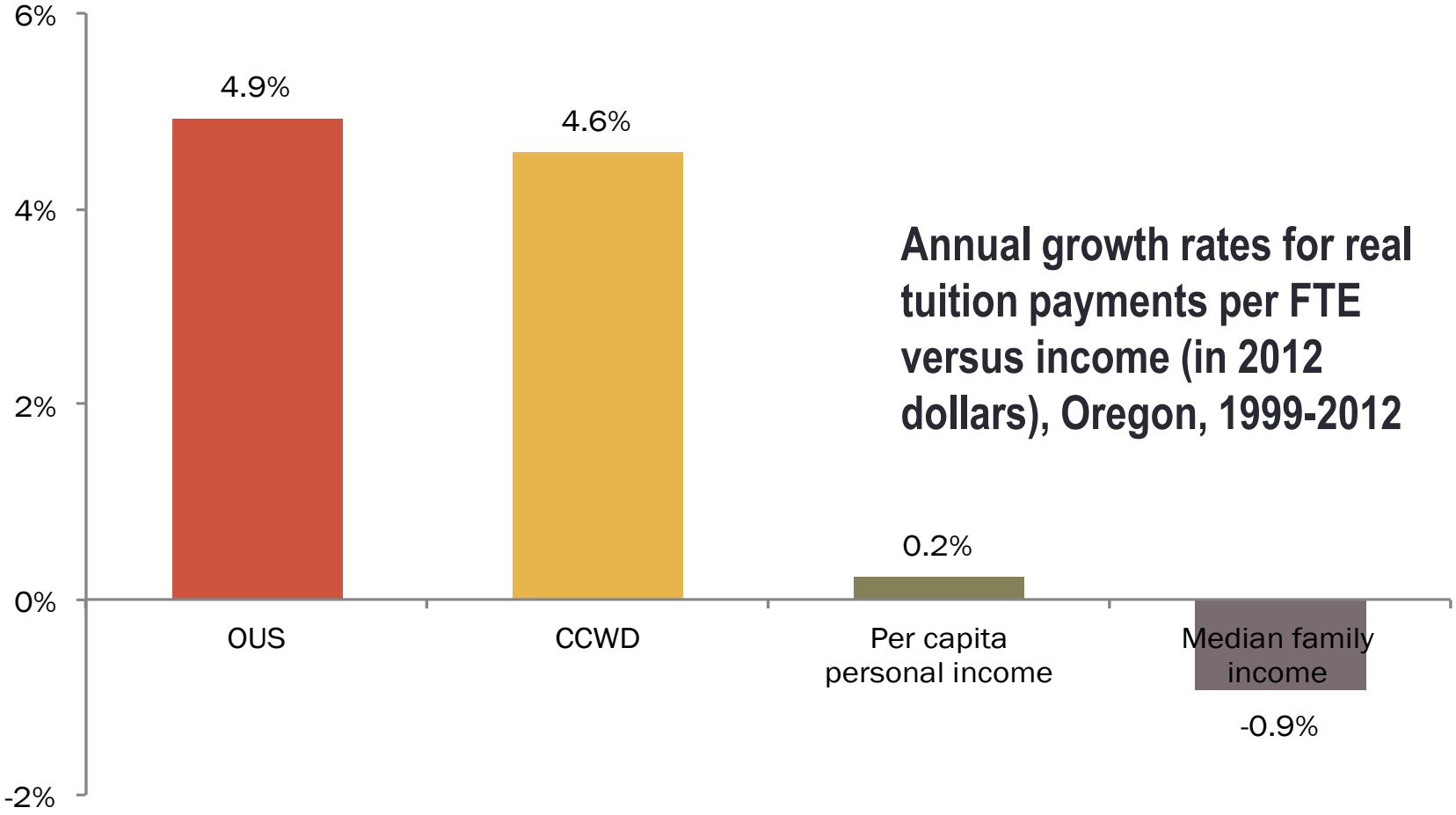
Evidence of Success

- Other states have seen reallocations within institutions
- Focus on key momentum points

# Productivity Strategy, Other Considerations



# Affordability Strategy




Source: ECONorthwest analysis of data from OUS, CCWD, and U.S. Census Bureau

# Affordability Strategy

Fully fund Shared Responsibility Model (SRM)

Or, with limited resources

Focus Oregon Opportunity Grant on first two years of attendance

# Affordability Strategy

*Examples for $0 EFC students using Shared Responsibility Model allocation methodology:*

$20,710 (Pub/Priv 4-yr)

— $8,800 (Student Share)

— $0 (Family Share/EFC)

— $5,645 (Pell)

— $0 (Tax credit)

**= $6,265 (Remaining need)**

**= $2,000 OOG award**

$17,026 (Public 2-yr)

— $5,800 (Student Share)

— $0 (Family Share/EFC)

— $5,645 (Pell)

— $0 (Tax credit)

**= $5,581(Remaining need)**

**= $2,000 OOG award**

# Affordability Strategy

- Meet students' full need for the first two years if academic achievement and academic benchmarks are met;
- Prioritize awarding aid to the highest financial need students combined with the OEIB's equity lens;
- Set a rolling OOG application deadline; and
- Significantly enhance the level of state funding for the OOG.

# Affordability Strategy, Outcomes

Expected Impact on Key Outcomes

Remove Affordability Barrier

Increase Certificate and Degree Completion

# Affordability Strategy, Outcomes

Measuring Impacts

Achievement Compact Metrics

- Number of students earning degrees/certificates
- Number of bachelor's degrees awarded to underrepresented residents

Additional Metrics

- Average student debt
- Student default rates

# Affordability Strategy, Outcomes

## Effect of Various Investment Levels

| Appropriation | Students Served | Description |
|---|---|---|
| $747m | 91,200 | SRM fully funded |
| $205m* | 59,316* | Modified OOG |
| $159m* | 44,550* | Modified OOG and $0 EFC |
| $115m | 33,500 | Current 2013-15 |

*Estimates (modeling still underway)

# Affordability Strategy, Equity

Alignment to Equity Lens

- Preference given to underserved students within legal constraints

Improved Outcomes for Underserved Students

- Remove affordability barrier to increase certificate and degree completion

Evidence of Success

- Increase in full-time enrollment results in nearly 11% higher completion rates
- Increased persistence beyond first year

Oregon Education Investment Board

# OUTCOMES & INVESTMENTS SUBCOMITTEE
# 2015-17 BUDGET RECOMMENDATIONS – Higher Education Coordinating Commission (HECC)
PART 1 – Identify Your Highest Priority Strategies

## Strategy 1: Productivity

The Productivity Strategy is a transformational shift in how post-secondary institutions will be funded in Oregon. It contains two interlocking components:

1. Using authority provided for it under law, **the HECC starting in 2015-17 will shift the primary basis for the allocation of state funding to public universities and community colleges from enrollment to student outcomes.** [1]

2. To support the capacity of institutions to execute the internal changes that will be necessary for them to flourish under an allocation model that rewards student success, **the HECC proposes that new state resources will be dedicated to our public universities and community colleges.**

The expected result will be changes in institutional behavior that will result in **increased completion rates** -- particularly for underrepresented students -- and significant progress toward meeting the goal of 40-40-20.

### (1) How does the strategy align with the OEIB's 2015-17 Budget Strategies & Priorities? Is the strategy related to repurposing, reallocating or allocating funds differently?

The HECC's Productivity Strategy represents a transformation in the State's approach to post-secondary funding. The two components of this proposal mirror the OEIB's Budget Strategy 2.3 ("Focus Base Funding for K-12 and Post-Secondary on Improving Key Outcomes") and Budget Strategy 2.1 ("Increasing Investment at All Levels").

The HECC's Productivity Strategy also builds upon the OEIB's Budget Strategy 1.3 ("A Coordinated Post-Secondary System that Connects with the Workforce"). By weighting certificates or degrees for which there is a particularly high labor market demand, outcomes-based allocation formulas will supply additional resources to colleges and universities for developing or expanding these programs.

[1] Together, these state funding streams included approximately $1 billion in the 2013-15 biennium. State funding represents approximately 30% of total funding for community colleges, and a lower percentage for public universities. Tuition remains the largest contributor to both.

(2) How will the strategy lead to improvement on the key outcomes identified by the OEIB, such as those identified in Achievement Compact or early learning hub requirements?

Under the Productivity Strategy, the basis for funding allocations would shift over time to key student outcomes. To date, conversation has focused on outcomes such as the following, weighted for underrepresented students and high-cost/high-demand fields (eg CTE and STEM). Versions of all of these measures are included on the current achievement compacts for community colleges and public universities:

- Dual credits
- Success in developmental education
- Certificates (including for transfer to four-year institutions)
- Associate's degrees
- Credit-hour progress toward degree
- Bachelor's degrees
- Post-graduation employment/income

Emerging evidence from states that are allocating some or all of their funding on the basis of outcomes suggests that colleges and universities are responding by focusing additional institutional resources on student success. Precisely what strategies institutions choose to employ to improve outcomes will depend on their unique institutional mission, culture, and expertise, and will not be dictated by the State. We would expect, however, that additional state support will permit institutions to enhance access to dual credit, accelerate the redesign of developmental education, expand certificate programs in fields targeted by the State, provide more guidance and counseling resources, and improve the availability of key courses needed to support degree completion.

(3) What measurable difference will the strategy make for children, families & students, specifically those who are underserved or put at risk? By when? What metrics will be used to measure improvement?

The Productivity Strategy is designed to increase degree completion generally and underserved students specifically by weighting their outcomes more heavily within the allocation formula and by providing additional resources to institutions in order to help them focus on student success.

By the end of 2014, the HECC will adopt a schedule and method for transition of the funding allocation formulas for colleges and universities that are based on enrollments to ones that are based upon achieving outcomes. Institutional budgets for the 2015-2017 biennium should include funding for institutions to begin re-organizing around identified student outcomes and effecting changes to improve student outcomes.

The metrics that will be used to measure improvement will be identical to the metrics that are the basis for funding allocation (see #2 above), with a particular emphasis on progress for underrepresented students. Where the allocation formula may reward aggregate totals, the HECC will monitor and report also on rates (eg degree completion rates).

If the Productivity Strategy is adopted, we would expect to find evidence of institutions beginning to reallocate resources and adopt strategies along the lines of what was suggested in the answer to #2 above within the 2015-16 school year. Progress on the student outcome measures themselves would follow, with a longer lag time for results that appear farther downstream (eg BA completion). For this reason, measuring key momentum points within overall outcomes will be important. Achievement Compact metrics such as enrolling in and completing developmental education courses and completing a certain number of credits each year are examples of momentum point metrics that will be used to monitor and reward progress starting in the 2015-16 school year.

### (4) How does this strategy demonstrate the priorities and values expressed in the OEIB equity lens?

The Productivity Strategy builds the Equity Lens into its foundation by weighting the success of underrepresented students into the funding allocation formulas themselves, and by providing institutions with new resources that will support their efforts to ensure that higher percentages of underrepresented students succeed in post-secondary education.

### (5) What evidence indicates this strategy will result in improvement?

As described above, emerging evidence from other states (the first scholarly version of which we expect to be published this August) suggests that the Productivity Strategy will encourage institutions to enhance their existing efforts to support student success, as well as to develop new strategies.

The evidence is unambiguous that improving results on early momentum points such as dual credit and developmental education is critical for reaching our ultimate goal of increased certificate and degree completion. Currently, less than one in ten Oregon students who start in developmental education graduate from community college within three years (Complete College America, 2012). Conversely, Oregon students who place into college-level math and do not require developmental education are almost three times as likely to persist to a degree (REL Northwest Data). Oregon community colleges have already begun to redesign their developmental education programs in light of this data; additional resources and incentives will accelerate and intensify that process.

Research likewise indicates that dual credit students have a higher college participation rate than high school graduates generally and that dual credit students who go on to college continue to the second year at a higher rate than freshman who have not earned dual credit (Oregon University System, *Dual Credit in Oregon: 2010 Follow Up*, September 2010). The Productivity Strategy proposes to create additional incentives and resources for colleges and universities to invest in this work.

### (6) At various levels of investment (modest, medium, substantial), what will the state be "buying"? What impact will this have on measurable results described above?

Especially given the recent history of declining state investment in public higher education,[2] merely changing the basis for funding allocations is unlikely to significantly improve productivity without a

[2] The 2013-15 totally state appropriation to community colleges and public universities is essentially unchanged from the 1999-2001 state appropriation, *in non-inflation adjusted dollars* and despite a 35% increase in full time equivalent enrollment.

corresponding increase in institutional funding to support them in building the capacity to do the work that will be required. Likewise, merely increasing institutional funding without ensuring that it is distributed in a way that incentivizes student success might not produce the gains that our goals demand.

The HECC has worked with community colleges and public universities to model how they would deploy additional resources in connection with improving student outcomes. These approaches will vary by campus and will depend on state funding levels. The following are provided as illustrative examples of the types of activities that would be likely to occur if the state made a substantial reinvestment in community colleges and public universities:

- Portland State University would increase access through recruitment and summer bridge programs, provide more support for students through a student transfer center, and would provide more flexible degrees through additional faculty.

- Oregon State University would strategically invest in supporting entry into the university (through advising and student engagement, partnerships with community colleges and high schools, and hybrid and online learning innovations), persistence (by institutionalizing at-risk student support, investing in "gateway" courses and implementing follow-up strategies with sophomores), and graduation (through career services, non-traditional completion programs, and using experiential learning in all major degree programs).

- The University of Oregon would improve access in the PathwayOregon Program. It would support students through a Retention and Completion Initiative and improve student completions through a Tenured Faculty Initiative and Graduation Assistance Grant.

In addition, consideration is being given to developing a strategy outside of the funding formula that would pay institutions for certain certificates are degrees that are identified as being particularly high priority, i.e. CTE certificates, STEM degrees.

### (7) What other conditions, supports and/or changes are needed for the strategy to be successful?

A key part of transitioning to outcomes-base funding will require new resources to support efforts that need to be undertaken at the campus level.

### (8) Are there state or federal policy or activities that could impact costs and/or success of strategy? In what ways?

Failure to maintain current levels of State investment would significantly hamper implementation of outcomes-based funding.

## Strategy 2: Affordability

Based upon recommendations from its Financial Aid Work Group, the HECC proposes that the State focus Oregon Opportunity Grant (OOG) support on the first two years of post-secondary attendance by:

- Pledging two years of aid if academic achievement and academic benchmarks are met;
- Authorizing the HECC through the Office of Student Access and Completion (OSAC) to prioritize awarding aid to the highest financial need students combined with the OEIB's equity lens;
- Authorizing the HECC to align OOG eligibility with federal Pell eligibility and set a rolling OOG application deadline; and
- Significantly enhancing the level of state funding for the OOG.

### (1) How does the strategy align with the OEIB's 2015-17 Budget Strategies & Priorities? Is the strategy related to repurposing, reallocating or allocating funds differently?

The HECC's Affordability Strategy is built upon the OEIB's Strategy 2 ("Focus investments on achieving student outcomes") and specifically the second leverage point cited in 2.3.2 ("Post-Secondary Access and Affordability").

The Affordability Strategy will build upon the existing Shared Responsibility Model student aid model by re-allocating and focusing the funds on Oregon's neediest students who demonstrate ability to complete their program of study by meeting progress requirements.

### (2) How will the strategy lead to improvement on the key outcomes identified by the OEIB, such as those identified in Achievement Compact or early learning hub requirements?

Within the OEIB's strategy to focus investment on achieving student outcomes, post-secondary access and affordability is a key priority. During the past decade, as state support for post-secondary education has declined, tuition payments per FTE at Oregon's community colleges have increased by more than 4.5 percent per year while median family incomes have declined by 0.9 percent. Even after taking financial aid into account, it costs Oregon students and their families approximately twice what it did a decade ago to attend in-state public colleges and universities. This financial toll – which is significant even for students that fully qualify for federal and state need-based grants – represents perhaps the single greatest barrier to student success in Oregon higher education. The Affordability Strategy is designed to help remove that barrier and increase the number of students earning certificates and degrees.

### (3) What measurable difference will the strategy make for children, families & students, specifically those who are underserved or put at risk? By when? What metrics will be used to measure improvement?

The Affordability Strategy is specifically designed to pledge State grant aid to students with financial need as identified on the Free Application for Federal Student Aid (FAFSA). Within that population,

students from underrepresented and underserved groups will be given precedence as permitted under current law.

Implementation of the Affordability Strategy will require changes to existing statutes and rules. Therefore, changes to student awards cannot be made until the 2016-17 academic year at the earliest. For certificates completed during the first year of implementation, student completion metrics could show improvement as early as 2017. The earliest that completion metrics for associate degrees would be available would be following the 2017-18 academic year and completion metrics at four-year institutions would be measureable no sooner than 2020.

Achievement Compacts contain metrics that will be used to measure improvement (i.e. number of students earning certificates and degrees, number of bachelor's degrees awarded to underrepresented minority Oregonians). Additionally, the HECC is proposing to track average student debt and student default rates.

### (4) How does this strategy demonstrate the priorities and values expressed in the OEIB equity lens?

The Affordability Strategy contains a component specific to implementing the OEIB's Equity Lens. Although it is not legally permissible to prioritize certain racial or ethnic groups when awarding grants, a design team will examine opportunities to target recipients by socio-economic status or geographic regions within the State as well as other strategies to diversify the pool of recipients. OSAC is also developing information based on census data to better understand how targeting low-income students will impact underrepresented students.

### (5) What evidence indicates this strategy will result in improvement?

The OEIB has identified persistence beyond the first year as a critical predictor for student achievement and career readiness. Conditioning grant awards beyond the first year on earned eligibility in exchange for the State's pledge of support will increase persistence. Research shows that reducing affordability as a barrier and increasing full-time enrollment increases certificate and associate degree completion rates by nearly 11 percent (Complete College America, 2011).

### (6) At various levels of investment (modest, medium, substantial), what will the state be "buying"? What impact will this have on measurable results described above?

The current appropriation for the OOG is $115,000,000 per biennium. This amount serves 33,500 students.

The cost of fully funding the Shared Responsibility Model for the next biennium would be $746,594,000. This amount would fund the unmet financial need for 91,200 students whether they are enrolled in their first year or sixth year of post-secondary education.

The Affordability Strategy proposes a middle ground between the current funding level and full funding of the Shared Responsibility Model by focusing on the first two years of enrollment. Maintaining current financial eligibility thresholds and slightly modifying the OOG formula reduces the cost to $204,664,476 to serve 59,316 students. With the same modifications and narrowing eligibility to those with $0

expected family contribution, the State investment would need to be $168,820,000. This would serve 44,550 students.

While the number of students receiving OOG awards does not directly translate into degree completion, within the context of the 40-40-20 goal, it is useful to note that every percentage point increase in associate degree completion rates translates to 519 additional degrees.

### (7) What other conditions, supports and/or changes are needed for the strategy to be successful?

In order for the Affordability Strategy to be successful, financial support from the State must be maintained. The State should reinvest in the OOG and, in the process, reclaim the Shared Responsibility Model as a shared commitment to Oregonians with the greatest financial need.

### (8) Are there state or federal policy or activities that could impact costs and/or success of strategy? In what ways?

There are several proposals at the federal level to change or possibly even do away with the FAFSA. The Affordability Strategy relies upon receiving information included on the FAFSA to make eligibility determinations.

In order for the Affordability Strategy to be successful, institutions would need to maintain current levels of institutional aid used for student aid. If institutions reduce their commitment to providing student aid, increases in State aid will essentially be used to replace institutional aid.

## PART 2: Describe Conditions, Processes & Partners (No more than 2 pages)

### (1) What do you need from other agencies / boards / groups to enable you to be most effective?

Efforts to create a seamless public education system that invests in early learning and builds strong foundations for school attendance and college going culture are critical to the success of strategies within post-secondary education.

### (2) What can your agency / board / group offer to other parts of the system to aid in alignment & transformation?

The HECC can offer data and information to inform policy decisions as well as analysis of changes to funding and allocation models.

### (3) Which strategies that you know are priorities for other agencies/boards/groups would enable you to achieve your results (better, faster, etc.), if any?

The HECC-OWIB (Oregon Workforce Investment Board) Task Force is studying how to best support and share responsibility for achieving the middle 40 of the 40-40-20 goal. They are also scrutinizing the role of labor market information which will be critical in devising the metrics within the Productivity Strategy's outcomes-based funding.

As mentioned earlier, the HECC will appoint a design team to work through the implementation of the Affordability Strategy. The HECC will rely on receiving those recommendations to build the structure of the Affordability Strategy.

### (4) Please identify at least one strategy for reducing costs or repurposing resources in your agency or policy area.

While the Affordability Strategy significantly reallocates funding, the Productivity Strategy represents a significant effort to incentivize the repurposing of resources at each post-secondary campus.

### (5) Who are your key partners, stakeholders, and community groups?

Each post-secondary institution is an important partner in the Productivity Strategy. Faculty members are also being included and consulted in this work. Additionally, the Oregon Community College Association is a critical partner in developing outcomes-based funding approaches for the Community Colleges.

The Engineering, Technology and Innovation Council is examining outcomes-based funding models for appropriations that are dedicated to increasing engineering and technology training and degrees within the broader Productivity Strategy.

The Oregon Student Association is participating in the work groups affiliated with both the Productivity and Affordability Strategies.

The Affordability Strategy emerged from recommendations endorsed by the HECC's Financial Aid Workgroup, which was convened in November 2013 in response to a charge from the OEIB. The Workgroup was comprised of HECC commissioners and leaders from OUS, community colleges, the independent post-secondary sector, student government, OSAC, the Office of the Treasurer, and the Oregon Community Foundation, and heard testimony and presentations from a variety of interested parties including financial aid administrators and other stakeholders. The group met at least monthly for six months.

## (6) What processes were used for public input in developing the strategies?

In addition to numerous individual and small-group meetings with stakeholders, the strategies have been publicly discussed at Commission and Commission subcommittee meetings. The Affordability Strategy emerged from the Financial Aid Workgroup (see above) which held numerous public meetings.

# STEM Investment Council: 2015-17 Budget Recommendations

Presentation to OEIB Outcomes & Investment Subcommittee

July 24, 2014

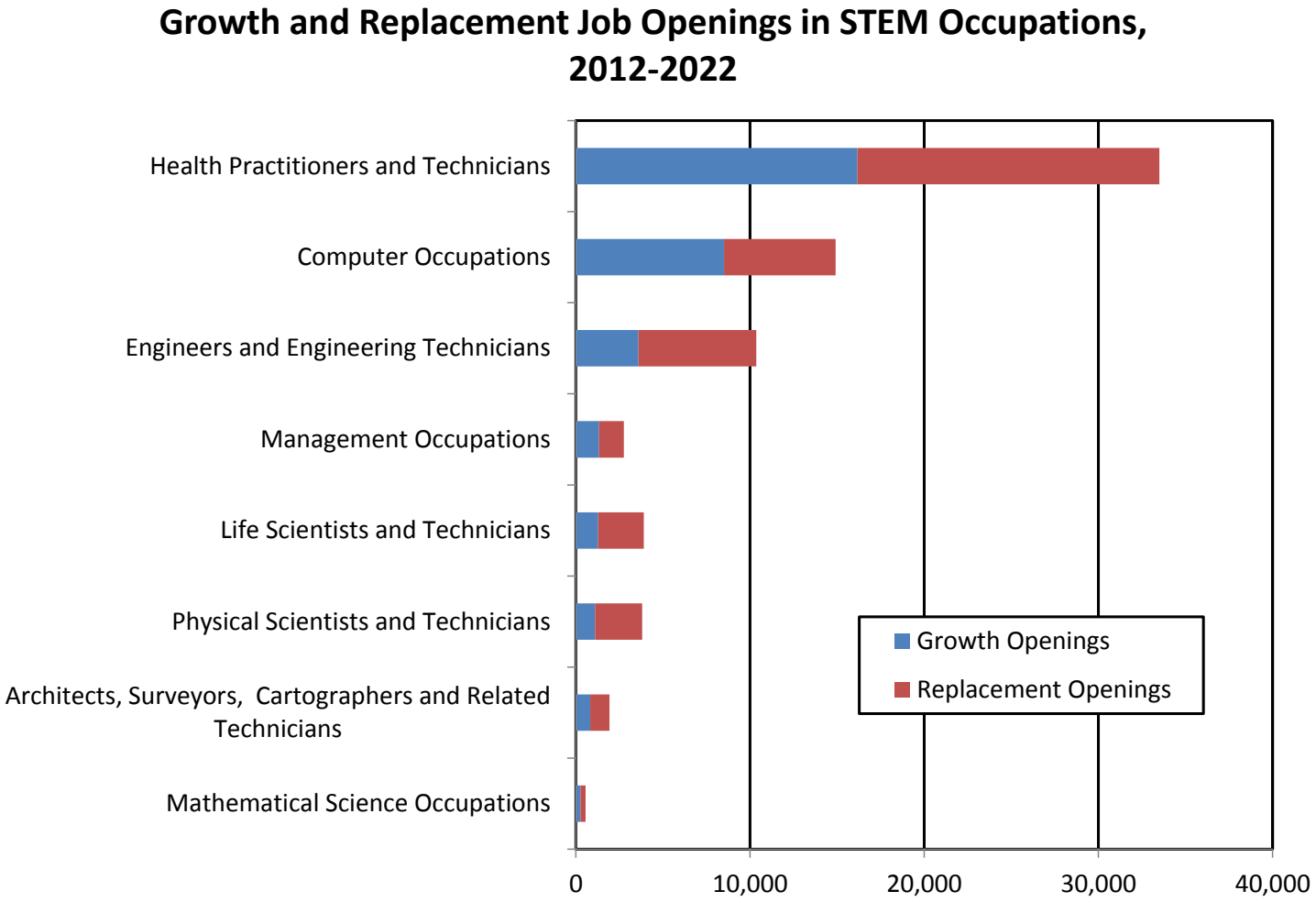
# STEM Investment Council

- Established 2012 by HB 2636; appointed Oct 2013.

- Charges:
  1. Make strategic policy and investment recommendations to Chief Education Officer, OEIB, and Legislature in order to:
     - Double the number of STEM degrees/certificates by 2025.
     - Double math & science achievement at 4$^{th}$ & 8$^{th}$ grade by 2025.

  2. Oversee the management of a STEM Investment Fund of public and private $ to achieve goals.

# STEM = Jobs




*Oregon Employment Dept, March 12, 2014*

# STEM = Innovation and Economic Growth

*Innovation is a primary driver of American prosperity…To ensure that innovation and productivity growth continue, more Americans than ever will need to be equipped with science, technology, engineering and math (STEM) skills.*

US Senate Joint Economic Committee, 2014

business oregon

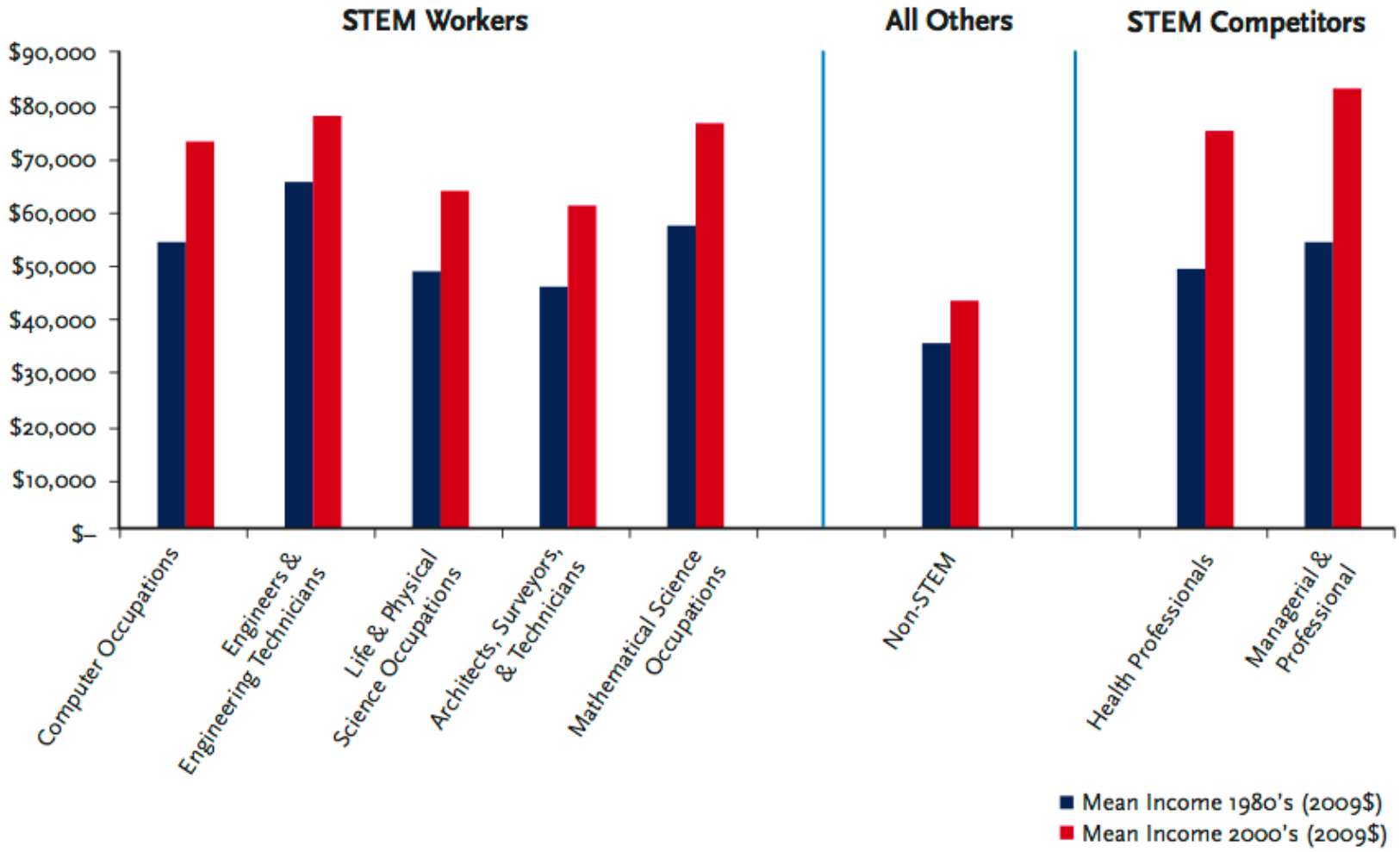
Drive Oregon
Innovation in Electric Mobility

OWET
OREGON WAVE ENERGY TRUST

ONAMI

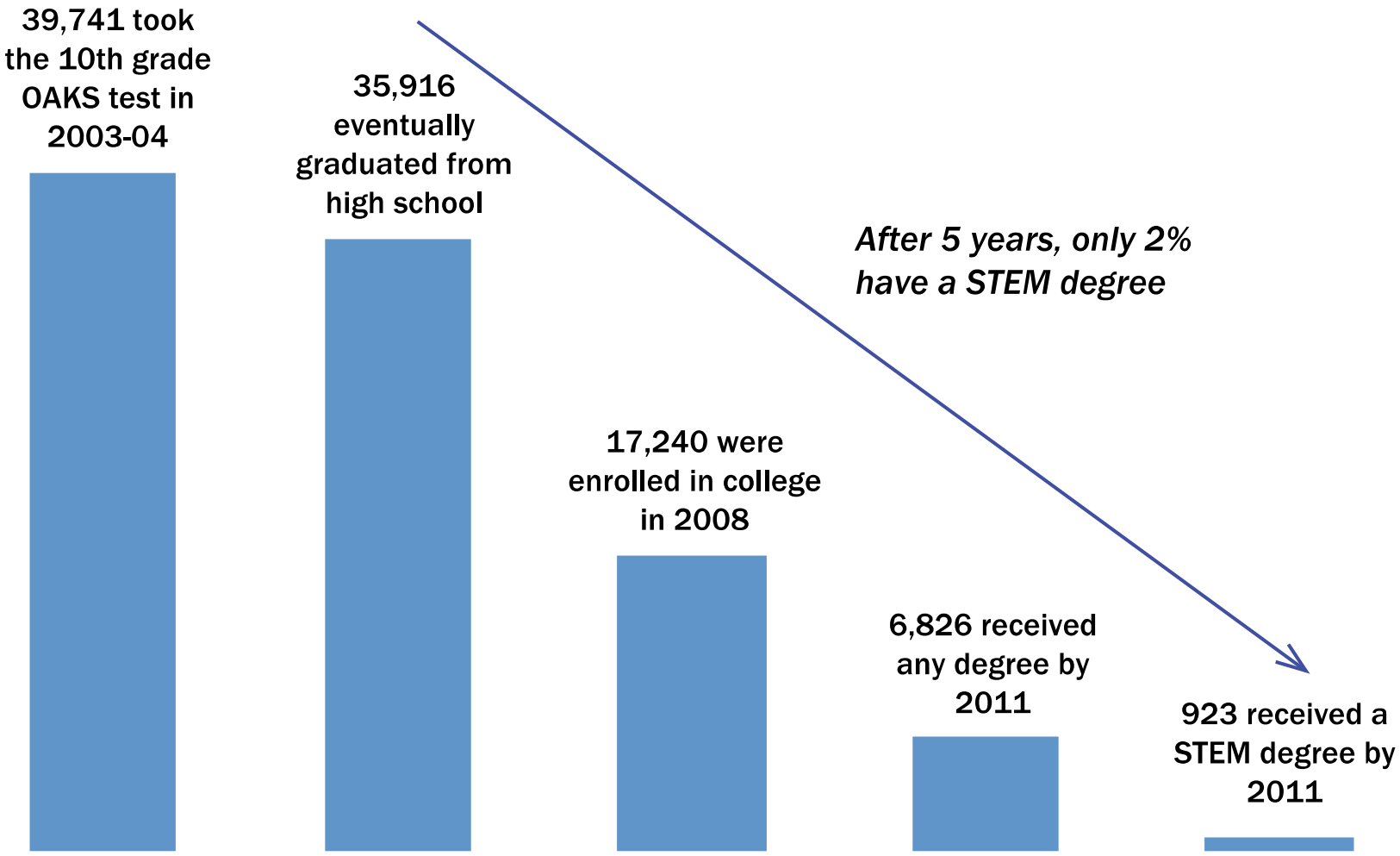
OTRADI

# STEM = Prosperity




Georgetown University Center and Education and the Workforce

# STEM Outcomes for the Class of 2005




Source: ECONorthwest analysis of ODE and National Student Clearinghouse data.

## Additional challenges

- Boredom!... Content is stripped of all interesting context.
- STEM is not viewed as accessible to women and students of color.
- Isolated pockets of excellence.
- Program rich, but systems poor… No networks for spreading what works.
- Lack of career connections.
- Unequal access to OST programs.
- Educators need support for new standards and hands-on learning.

# Highest Priority Strategies

- Strategy 1: STEM Innovation Network
  - A statewide network of Regional STEM Hubs to accelerate the spread and implementation of effective practices; providing coherency and capacity to deliver local solutions to local needs.
- Strategy 2: Strategic STEM Programming
  - Increase access for students in the opportunity gap to highly effective programming inside and outside school, particularly at the middle-school years.
- Strategy 3: Post-Secondary Talent Development
  - Seed funding for 2-year and 4-year institutions to create degree and certificate programs aligned with industry needs. Support services for students of color to increase attainment.

# Strategy 1: STEM Innovation Network

- Network of regional partnerships to catalyze economic, workforce, education, and community development related to STEM.
- Based on “collective impact” approach and multiple stakeholders.
- Requires matching funds or in-kind support from communities.
- Guided by common outcomes and evaluation framework aligned to OEIB scorecard.
- Leverages partnerships with STEM employers and out-of-school programming for:
  - Educator professional development
  - Increasing student motivation and engagement
  - Increasing career connections with mentorships & internships
  - Using community issues as opportunities for deeper learning
  - Earning early college credit in STEM
- STEM Hubs will be integrated over time with Regional Achievement Collaboratives.

# STEM Innovation Network, Outcomes

1. Key Outcomes:
   - ✓Improve attendance rates.
   - ✓Increase 8th Graders Demonstrating Proficiency in Math
   - ✓Increase Students On Track With Credits By End of 9th Grade
   - ✓Increase Students Earning College Credit in High School
   - ✓Increase 5-Year Cohort Graduation Rate
   - ✓Increase Certificates, Associates Degrees, and Transfers
   - ✓Increase degrees (bachelors & higher)
   - ✓Decrease Achievement Gaps on All Metrics
   - ✓Increase College Enrollment Rate for Underserved Students
   - ✓Increase Educator Satisfaction with Professional Support

# STEM Innovation Network, Outcomes

2. How We Will Measure Impact
   - Data sharing agreements with all partner institutions.
   - Common evaluation framework across network.
   - Use of the longitudinal data system and community indicators.
   - Disaggregation by race, gender, FRL, and ELL.

3. A moderate investment would support:
   - “Backbone” coordination support for 6 current Regional STEM Hubs.
   - Expansion to an additional 6 regions (potentially: Gorge, Lane, Klamath Falls, Medford, East Multnomah County, Mid-Willamette.)
   - Support to ensure “connective tissue,” exchange of ideas and information, evaluation, technical assistance, and capacity-building.
   - Additionally, partial program funding aligned with outcomes.

# STEM Innovation Network, Equity:

- How will strategy improve outcomes for underserved and at risk populations?
  - Improving outcomes for underserved and underrepresented students is a central tenet of each Hub's strategic focus and all data will be disaggregated by ethnicity.
- What evidence do you have strategy will be successful?
  - Regional Hubs have demonstrated the ability to catalyze changes in states across the country: WA, NC, OH, TX, NY, and more.
- How does strategy align to Equity Lens?
  - Each Hub's "Partnership Plan" details how they are operationalizing the values and principles of the Equity Lens, based on the demographics of their region.
  - Each Hub is expected to include leadership from underserved and underrepresented populations.

# STEM Innovation Network, Other Considerations

- Provides critical implementation network to disseminate effective strategies and models.
- Serves as a feedback and communication conduit to inform policy and investment decisions.
- Aligns well with Regional Achievement Collaboratives to spur local innovations and build community prosperity.
- Increases efficiencies through aligned local programming.
- As governance capacity increases, can shift toward more outcomes-based funding rather than grants.

# Strategy 2: Strategic STEM Programming

- Increase access to highly effective programming inside and outside school, particularly at the middle-school years.
- 75% of all investments will be serving underserved and underrepresented students.
- Leverages both public and private $ from industry and philanthropy through the STEM Investment Fund.
- Strong evaluation/research component to determine efficacy.
- A multi-tiered approach that will provide funding for:
  - **Development:** shorter-term interventions designed to spark innovations and research promising practices and approaches.
  - Evaluation:
  - **Dissemination**: Multi-year funding to spread effective program interventions that have demonstrated evidence of impact.
- **Primary Foci:** Computing skills, engineering, and mathematics (via adaptive learning technologies and project applications).

# Strategic STEM Programming, Outcomes

- Impact on Key Outcomes
  - ✓ Improve attendance rates (increased motivation and engagement)
  - ✓ Increase 8th Graders Demonstrating Proficiency in Math
  - ✓ Increase Students On Track With Credits By End of 9th Grade
  - ✓ Increase 5-Year Cohort Graduation Rate
  - ✓ Decrease Achievement Gaps on All Metrics
  - ✓ Increase College Enrollment Rate for Underserved Students
  - ✓ *Increase student interest in STEM careers.*
  - ✓ *Decrease enrollments in developmental mathematics.*
- How We Will Measure Impact
  - Data sharing agreements with all partner institutions.
  - Use of the longitudinal data system.
  - Common student survey to gauge motivation, aspirations, and impact.
  - Disaggregation by race, gender, FRL, and ELL.
- A modest to medium investment will:
  - Identify & deploy adaptive learning approaches in K-8 mathematics
  - Increase use of project-based learning in 4-8.
  - Widespread early coding experiences in underserved communities.
  - Leverage at least 25% private matching in first biennium.

# Strategic STEM Programming: Equity

- How will strategy improve outcomes for underserved and at risk populations?
  - Increased access to quality STEM learning experiences inside and outside of school for students of color and students in poverty. Stem the “summer slide.”
- What evidence do you have strategy will be successful?
  - Middle-school students expressing interest in science is strongest correlation to future academic and career choices.
  - Poor students have 6000 hours less learning opportunities by 6th grade.
  - 75% of Nobel Prize winners in the sciences report that their passion for science was first sparked in non-school environments.
  - Promising results in math learning and engagement using adaptive learning platforms and game theory for student motivation.
- How does strategy align to Equity Lens?
  - 75% of investments will be to close the opportunity gap in STEM
  - Will include culturally-responsive organizations and programs.

# Strategic STEM Programming, Other Considerations

- Will foster greater alignment of in-school and out-of-school learning.
- Research and evaluation capacity at OEIB will be used to determine program effectiveness.
- Will spread effective programming ideas via STEM Innovation Network.
- Enables access to communities not served by a STEM Hub.

# Strategy 3: Post-Secondary Talent Development

- Short-term program-development funding for 2-year and 4-year institutions to create degree and certificate programs aligned with industry needs.
  - Health care & bio-sciences
  - Computer science & informatics
  - Engineering & mechatronics
  - High-tech manufacturing
  - Agriculture & natural resources
- Additional support to improve student recruitment, retention, and completion for women and students of color. Examples:
  - Louis Stokes at OSU & PSU as a model program
  - Internships and undergraduate research
  - Cultural and academic support
  - Tuition incentives

# Post-Secondary Talent Development, Outcomes

- Impact on Key Outcomes
  - ✓Increase Certificates, Associates Degrees, and Transfers
  - ✓Increase degrees (bachelors & higher)
  - ✓Decrease Achievement Gaps on All Metrics
  - ✓Increase College Enrollment Rate for Underserved Students
- How We Will Measure Impact
  - Data sharing agreements with all partner institutions, disaggregated by race, and gender.
  - Employment department data – projections and employment records.
  - Industry needs analysis.
  - Disaggregation by race, gender, FRL, and ELL.
- Effect of Various Investment Levels
  - Medium investment to build targeted programs: initial faculty, create support programs, modest equipment.

# Post-Secondary Talent Development, Equity:

- How will strategy improve outcomes for underserved and at risk populations?
  - Increases retention and attainment of post-secondary degrees and certificates in order for underserved students to get family-wage earning jobs in higher-paying STEM fields.
- What evidence do you have strategy will be successful?
  - Substantial evidence from 15 years of ETIC funding demonstrates that moderate funding and attention to outcomes can incentivize institutions to adapt to industry needs.
  - Louis Stokes Alliance for Minority Participation program at OSU and PSU have dramatically increased retention and attainment for students of color. Similar programs would be supported across other institutions.
- How does strategy align to Equity Lens?
  - Provides support programs to increase minority student success and participation in STEM.

# Post-Secondary Talent Development, Other Considerations

- Note that these funds are short-term to get programs initiated. Institutions would have to sustain them through enrolments and other revenue streams.
- Will have to prioritize industry sectors and geography.
- Can build off successful aspects of ETIC's model and industry relationships.

# STEM Investment Council
## 2015-17 Budget Recommendations

**PART 1**

*"An excellent education remains the clearest, surest route to the middle class. To compete with other countries we must strengthen STEM education…Reaffirming and strengthening America's role as the world's engine of scientific discovery and technological innovation is essential to meeting the challenges of this century."*

President Obama

President Obama, Governor Kitzhaber, and the Oregon Legislature have made preparing and inspiring a new generation of innovators in science, technology, engineering, and mathematics (STEM) a priority to drive our creative economy and to create more family-wage earning jobs for Oregonians, particularly for our students in poverty. At a time when the economy is slowly getting back on track, STEM jobs are growing at more than double the pace of non-STEM jobs. Furthermore, lifetime earnings in STEM jobs are 25% greater on average, which results in greater prosperity for individuals as well as additional revenue for the State.

| | Non-STEM Job | STEM Job | % Difference |
|---|---|---|---|
| High School Diploma or Less | $15.55 | $24.82 | 60% |
| Some College or Associate Degree | $19.02 | $26.63 | 40% |
| Bachelor's Degree Only | $28.27 | $35.81 | 27% |
| Graduate Degree | $36.22 | $40.69 | 12% |

In such a complex, technology-rich world, STEM literacy is essential for our youth to be full participants and contributors to our society. Unfortunately, far too few of our youth are leaving our P-20 education system prepared to take advantage of these opportunities. This is especially true for our students of color, where performance on national standardized tests are less than half of their white counterparts. So, while literacy in STEM offers a hope to help break the cycle of poverty, it is also functioning as a barrier for many of our students.

*Oregon student proficient or above on 2011 National Assessment of Educational Progress (NAEP).*

| Race/Ethnicity | Math (4th) | Math (8th) | Science (4th)* | Science (8th) |
|---|---|---|---|---|
| White | 43 | 37 | 40 | 43 |
| Black | 14 | 18 | 12 | NA |
| Hispanic | 15 | 17 | 12 | 14 |
| Asian | 62 | 53 | 44 | 43 |
| Native American | 21 | 16 | 25 | NA |
| Two or more | 46 | 36 | NA | 39 |

**2009 is last available scores for 4th grade science.*

In 2012 the Legislature, established the STEM Investment Council in order to dramatically improve student motivation, proficiency, and attainment in STEM. The Council's specific goals are by 2025 to:

1) Double the number of STEM degrees and certificates earned by Oregonians; and,
2) Double students' proficiency in math and science at 4th and 8th grade.

**Some of the Challenges**

- Oregon is not producing enough STEM graduates to meet the demand; less than ½ of the national average.
- Students are bored! STEM content is stripped of most interesting context.
- STEM is not viewed as accessible to girls and students of color.
- Isolation: pockets of excellence in the State, but little exchange amongst educators.
- Program rich, but systems poor. No implementation networks for spreading what works.
- Few career & industry connections with learning experiences.
- Unequal access for students of color to out-of-school STEM programs.
- Educators need support for new standards and hands-on learning.

**Priority Solutions:**

1. **STEM Innovation Network:** Establish a statewide network of regional STEM partnerships to catalyze economic, workforce, education, and community development. This collaborative network will reduce isolation of practitioners, foster greater communication, exchange of ideas and intellectual resources, and more effective implementation of evidence-based practices to enact local solutions to local needs. These Regional STEM Hubs will be integrated over time with other regional collaborations as appropriate to the communities they serve.

2. **Strategic STEM Programming:** Increase access to successful evidence-based and outcomes-focused STEM programs during and beyond the school day via a multi-year strategic investment fund, already established by statute under the STEM Investment Council. Public funds will be leveraged to garner contributions from industry and philanthropy. 75% of the funding will go to programs serving students of color, girls, and high-needs communities. Program priorities will include dramatically impacting mathematics learning (effectively implementing the Common Core), computing science, and engineering—especially at the middle school years.

3. **Post-secondary Talent Development:** Tightly couple educational outcomes to economic, social, and workforce needs. Increase the adaptability of post-secondary institutions—both community colleges and universities—to changing economic and workforce needs in high-demand STEM fields, while providing support programs that increase recruitment, retention, and completion of women and students of color.

***(1) How do the strategies align with the OEIB's 2015-17 Budget Strategies & Priorities? Is the strategy related to repurposing, reallocating or allocating funds differently?***

The STEM Investment Council believes that the most critical aspect of a student-centered system is that of student engagement—fostering cultures where each and every student is valued and where they are invested in their own, deeper learning. At it's core, STEM is about innovation, creativity, critical thinking, problem solving, and communicating ideas. STEM is about encouraging students to be thinkers, dreamers, and doers; not just

rememberers. These STEM priority recommendations focus on developing an educational ecosystem that includes formal and informal learning environments to create experiences that engage students in deeper thinking, provide authentic contexts, create connections to potential career aspirations, and draw upon local issues for project-based explorations.

While STEM is specifically identified in strategy 2.3 (Transformative Investments), our priority recommendations align well with each of the three OEIB's overarching strategies. Most of our recommendations are reallocations and expansions of funding provided by (2012) HB3232, Connecting to the World of Work. Additionally, we are recommending repurposing of the ETIC (Engineering and Technologies Industry Council) "renewable" funds to form the basis for the Post-Secondary Talent Development strategy, and expanding this approach to include additional high-demand sectors.

**OEIB Strategy 1 (creating a seamless, student-centered system):** The three proposed STEM strategies focus on critical transition points with special attention to increasing alignment across the 11-14 system for students pursuing STEM credentials in both the middle 40 as much as the upper 40. Our recommendation #3 (Post-secondary Talent Development) is explicitly tied to OEIB strategy 1.3 (Post-secondary system that connects with the workforce). Furthermore, the proposed Regional STEM Hubs are founded on the tenets of collective impact and are an essential element of OEIB strategy 1.4 (regional collaboration and collective responsibility). We expect that over time, these Regional STEM Hubs will be integrated with many of the other regional initiatives.

**OEIB Strategy 2 (Investing in student outcomes):** Investing in STEM is specifically identified in OEIB's strategy 2.3, and each of our three proposed investments are targeting the key student outcomes, including: 5$^{th}$ grade math proficiency, 6$^{th}$ grade on track, 9$^{th}$ grade on track, college credits earned in high school, high school completion, and post-secondary enrollment. Key outcomes for colleges and universities include enrollment, persistence, and certificates and degrees awarded.

**OEIB Strategy 3 (build statewide support systems):** The network of Regional STEM Hubs will be a valuable implementation and support network that will amplify the impact of the Network of Quality Teaching and Learning, support school and institutional improvement, and to gather and disseminate evidence-based practices—both from local investments and national research. In addition, one of the fundamental purposes of the Strategic STEM Programming will be to rapidly assess the efficacy of STEM programs, followed by scaling those which demonstrate evidence of success.

***(2) How will the strategies lead to improvement on the key outcomes identified by the OEIB, such as those identified in Achievement Compact or early learning hub requirements?***

Through an integrated strategy across the P-20 continuum, these strategies will address the following OEIB-identified outcomes. Please see question #3 for a more complete picture of how these outcomes will be addressed across the three strategies.

- ✓ Improve attendance rates (increase motivation and engagement)
- ✓ Increase 8th Graders Demonstrating Proficiency in Math
- ✓ Increase Students On Track With Credits By End of 9th Grade
- ✓ Increase Students Earning College Credit in High School

- ✓ Increase 5-Year Cohort Graduation Rate
- ✓ Increase Certificates, Associates Degrees, and Transfers
- ✓ Increase degrees (bachelors & higher)
- ✓ Decrease Achievement Gaps on All Metrics
- ✓ Increase College Enrollment Rate for Underserved Students
- ✓ Increase Educator Satisfaction with Professional Support

***(3) What measurable difference will the strategy make for children, families & students, specifically those who are underserved or put at risk? By when? What metrics will be used to measure improvement?***

These strategies all have a specific focus to increase the interest, preparation, attainment, and participation of students of color and women in the STEM fields. *All partners will be required to have specific Equity targets and to disaggregate data ethnicity, gender, ELL (English Language Learner), and FRL (Free & Reduced Lunch as a proxy indicator for poverty).* The longitudinal data system, institutional research units at post-secondary institutions, as well as other community indicator databases (such as at UO) will be used to gather data to monitor and assess the impact of these investments. Additional instruments will be used to assess impact on "affective domain" indicators such as student motivation, awareness of STEM careers, teacher self-efficacy, community/parent awareness of STEM options, etc.

Though a more complete evaluation framework is currently being developed by leaders from across the State, some of the initial metrics for the strategies will be:

| STEM Innovation Network | Strategic STEM Fund | Post-secondary talent dev. |
|---|---|---|
| 4th and 8th grade math & science scores.<br>College-going rates.<br>STEM college credits earned in HS.<br>Student interest in STsEM careers<br>Student attendance rates<br>Student graduation rates<br>Decrease enrolment in developmental math<br>STEM teacher confidence.<br>STEM teacher satisfaction with PD.<br># of student & teacher internships.<br>Participation rates in out-of-school STEM programs.<br># STEM professionals volunteering.<br>Parental/community awareness of STEM and STEM careers. | URM* student participation rates.<br>Student interest in STEM.<br>Student career awareness in STEM.<br>Student enrolment in STEM electives.<br>Student post-secondary intent.<br>Student STEM identity.<br>Student school attendance rates.<br>Student graduation rates. | Student enrolments in STEM courses.<br>Declared STEM majors.<br>Student retention in STEM major.<br>STEM graduates.<br>Course passing rates.<br>Developmental math participation. |

* URM: Underrepresented minority.

***(4) How do these strategies demonstrate the priorities and values expressed in the OEIB equity lens?***

Literacy in STEM is a passport to opportunities that can break the cycle of poverty, enabling access to higher paying and more stable jobs. STEM skills also are necessary to be a full participant in this rapidly changing, technologically rich society. However, there are currently severe racial disparities in STEM for our students of color. Not only are African American, Hispanic, and Native American students performing at less than half of their white counterparts on national standardized tests in math and science, but there are also very few role models who can serve as inspiration. Furthermore, subtle social messaging can reinforce low expectations for these students and can bias them away from STEM pathways.

Studies have shown that the "hands on, minds on" learning approaches that are fundamental to quality STEM education show dramatic improvements for English Language learners, it keeps students engaged in school, and draws upon place-based learning opportunities that reinforce connections to the broader community. Each of the three proposed strategies have an explicit focus on Equity.

Strategy 1—STEM Innovation Network: Each of the Regional STEM Hub's "Partnership Plan" (their guiding 'business plan' and agreement), details how they are operationalizing the values and principles of the Equity Lens based on the demographics of their region. Each Hub is expected to include leadership from underserved and underrepresented populations within their governance structure and all data is required to be disaggregated by ethnicity, poverty, and gender. Program strategies must also include plans to actively recruit and support students of color, coordinating with culturally inclusive organizations wherever possible.

Strategy 2—Strategic STEM Programming: A recent release from the After School Corporation claims that children of poverty, have spent 6,000 fewer hours in learning environments than middle-class students by 6th grade. Many of those students, in both urban and rural regions of Oregon, are students of color. This strategy would focus at least 75% of the investments on closing the opportunity gap through increased access to both in-school and out-of-school STEM programs, especially at the upper elementary and middle-school years. Summer programs through culturally-responsive organizations in communities of color would be high priorities to receive support.

Strategy 3—Post-secondary talent development: In addition to providing start-up funding for high-demand post-secondary STEM programs of study, institutions would be required to develop support services to increase retention and attainment of students of color. These would be modeled after such effective programs as the Louis Stokes Alliance for Minority Participation (LSAMP) at OSU, which has doubled the number of students of color enrolling in STEM in four years. In fact, 46% of the students of color at OSU are now STEM majors. Support would be provided to spread the critical elements of the LSAMP program to other institutions.

***(5) What evidence indicates this strategy will result in improvement?***

Strategy 1—STEM Innovation Network: Several national models have shown the effectiveness of the Regional Hub model to improve student learning and interest in STEM through strong partnerships between K-12, post-secondary, industries, and out-of-school STEM programs. Some model states include, Washington, North Carolina, New York, Ohio, and Texas. The success of these Hubs has been through the realization that STEM employers are powerful drivers of economic growth and community revitalization—enabling communities to both attract and to grow talent through great schools, as well as to attract new investments in a virtuous cycle. The places where it has been most successful have been where there are strong partnerships between industry, K-12, post-secondary, and out-of-school educators to better align programming needs and to create more authentic, hands-on learning environments.

Strategy 2—Strategic STEM Programming: Research has shown that student interest in STEM declines in the upper elementary and middle school years, showing that 60% of students lose interest in science between 1st and 8th grade with a precipitous drop in 5th

grade. This has been attributed to a combination of students' "identity formation" (fear of risk-taking, need for social acceptance, etc. where social messaging and peer values shape one's view of themselves as being STEM competent or not) coupled with the shift in how science and math are traditionally taught—transitioning from hands-on experiences to text-based learning and a focus on recall of facts and procedures. Social messaging biases for students of color and girls have a particularly strong influence during this time and results in the vast majority of them not perceiving pathways in STEM as a viable option.

In addition, much national research has also been done to demonstrate the large impact that out-of-school programs have on developing student interest in STEM. 75% of STEM Nobel Laureates credit out-of-school experiences as sparking their initial interest. However, recent calculations estimate that by the time they reach 6th grade, children of poverty—a disproportionate number who are also students of color—have spent 6,000 fewer hours in out of school learning experiences than middle-class students. Combine this with the fact that children spend less than 20% of their waking time in school, and it is clear that increasing access to out-of-school program support is a powerful way to address the opportunity gap.

Strategy 3—Post-secondary talent development: This strategy is built upon the successful elements of the Engineering and Technology Industries Council's (ETIC's) "renewable" funds, which has provided short-term funding to rapidly adapt university programs to changing industry needs in engineering and computer sciences. Over the years ETIC has developed sophisticated processes to ensure that the funds were spent effectively and tied to specific outcomes. The Post-Secondary Talent Development strategy would extend this approach beyond 4-year universities to include community colleges, as well as additional high-demand sectors previously mentioned.

The second part of this strategy is to create wrap-around services to increase the retention and attainment of students of color and women in STEM certificates and degrees. These would be modeled after such effective programs as the Louis Stokes Alliance for Minority Participation (LSAMP) at OSU, which has doubled the number of students of color enrolling in STEM in four years. In fact, 46% of the students of color at OSU are now STEM majors. Support would be provided to spread the critical elements of the LSAMP program to other institutions.

***(6) At various levels of investment (modest, medium, substantial), what will the state be "buying"? What impact will this have on measurable results described above?***

Strategy 1—STEM Innovation Network: A medium investment would support the expansion of regional, multi-sector efforts to improve STEM educational outcomes that will: 1) increase student motivation, engagement, and career/educational goals; 2) improve educator's confidence and competence; 3) leverage STEM employers and out-of-school programming. Specifically, the investments will be used for:

- Backbone" coordination support for 6 current Regional STEM Hubs (Portland Metro, South Metro-Salem, Eastern Oregon, Coastal, Central Oregon, and Douglas Co.)
- Expansion to an additional 6 regions (potentially: Gorge, Lane, Klamath Falls, Medford, East Multnomah County, and Mid-Willamette.)
- Support to ensure "connective tissue," exchange of ideas and information, evaluation, technical assistance, and capacity-building.
- Programming funding for teacher professional development, internships and mentorships, early college credit programs, and effective out-of-school programs.

Strategy 2—Strategic STEM Programming: A modest to medium investment would be leveraged by at least 25% matching private funds through the STEM Investment Fund established in HB 2636 (2012). Specifically, the funding would be used to:

- Identify & deploy adaptive learning approaches in K-8 mathematics (such as flipped classrooms or use of adaptive learning software that provides educators and students with timely formative assessments and targeted interventions).
- Increase use of project-based learning in 4-8.
- Widespread early coding experiences in underserved communities.
- Early engineering experiences, foundational to implementing the Next Generation Science Standards (NGSS).

Strategy 3—Post-secondary talent development: A medium investment would increase post-secondary degree and credential attainment at 4-year and 2-year institutions. Short-term funding would support creation of targeted programs and enable institutions to hire initial faculty and make modest equipment purchases. Funds would also improve academic and cultural support programs for students of color and women in STEM programs.

***(7) What other conditions, supports and/or changes are needed for the strategy to be successful?***

To ensure the effective implementation of these strategies, additional capacity is required to: 1) provide coordination and ongoing communication across the Regionals STEM Hubs; 2) successfully manage funded partner investments, provide technical assistance, and gather research data on the impact of funded programs; and, 3) manage industry-institutional partnerships to ensure program responsiveness to changing industry talent-development needs. Additionally, support will be needed from the OEIB Office of Research to evaluate the impact of these investments.

***(8) Are there state or federal policy or activities that could impact costs and/or success of strategy? In what ways?***

These STEM initiatives complement and reinforce several other efforts, including: accelerated learning and dual-credit, the network of quality teaching and learning, college access grants, Regional Achievement Compacts, CTE Revitalization, etc. Each of these efforts align with the outcomes being sought within the proposed STEM priorities. In addition, the implementation of the longitudinal database will allow the STEM Investment Council to develop a much more robust evaluation and oversight framework to monitor the effectiveness of these strategies and to supply the Regional STEM Hubs with timely business intelligence to guide their actions.

## PART 2: Describe Conditions, Processes & Partners (No more than 2 pages)

***(1) What do you need from other agencies / boards / groups to enable you to be most effective?***

- A unified message from Legislators, the Governor, Chief Education Officer, State Board of Education, Higher Education Coordinating Commission, Workforce Investment, Economic Development about the critical role that a focus on STEM has on prosperity for individuals as well as communities; tightly coupling economic, workforce, and

education. Furthermore, effective pedagogy in STEM represents a powerful transformation as to how we engage our students through more meaningful educational experiences—shifting them from consumers of knowledge to creators of it.

- It would be very helpful if the Department of Education could bring greater internal alignment and integration between STEM, CTE, CCSS, NGSS, Ed Tech, and other initiatives—all of which interrelate within the broader STEM conversation. While these fit naturally together, most educators in the field treat them as separate initiatives and are overwhelmed.
- It would be very helpful to provide alternative routes to certification for more STEM career professionals to transition into the teaching profession in order to bring greater contextual awareness and project-based learning to reinforce the implementation of the new math and science standards—especially the "disciplinary practices."
- Currently, there are conversations with the STEM Employers Coalition and Comcast Spotlight to conduct a statewide media campaign marketed toward students of color and to increase awareness of the innovative STEM employers in Oregon and their work. Utah has run a similar campaign "*STEM: Curiosity Unleashed*." (http://stem.utah.gov/media-library/)

***(2) What can your agency / board / group offer to other parts of the system to aid in alignment & transformation?***

- Regional STEM Hubs can provide critical support for, and engagement with, educators and industry partners to assist with Regional Achievement Collaboratives as well as Eastern Promise Replication grants. Most STEM Hubs have dual credit and internships as part of their goals and are very closely working with the post-secondary institutions.
- All three Priority Strategies connect with the world of work and furthering the goals of the 40-40-20. In particular, these are strong complements to the current CTE Revitalization efforts.
- The network of Regional STEM Hubs will be a vital conduit for the implementation of the new math and science standards—Common Core State Standards Mathematics (CCSS-M) and the Next Generation Science Standards (NGSS)—providing professional development opportunities as well as connections to industry partners to make the standards more relevant.
- Oregon is now part of STEMx, a multi-state initiative that provides an exchange of best practices, research, development of coherent national policy recommendations, common evaluation metrics, and more. This network can be leveraged to gain access to Federal funding opportunities and we can learn which models work (and what doesn't) as well as to draw upon other state's policy reforms.

***(3) Which strategies that you know are priorities for other agencies/boards/groups would enable you to achieve your results (better, faster, etc.), if any?***

- Regional Achievement Collaboratives
- Network of Quality Teaching and Learning
- CTE Revitalization
- Math-Science Partnerships
- Accelerated Learning & Dual Credit
- College access grants
- Early Learning Hubs

- Eastern Promise replication

***(4) Please identify at least one strategy for reducing costs or repurposing resources in your agency or policy area.***

- Collaborations within the Regional STEM Hubs make it easier to attract Federal and private investments. This strategy also provides more efficient use of both human and financial resources within a community through greater alignment and tighter focus of programs to achieve the desired outcomes.
- The Post-secondary Talent Development strategy represents a repurposing of $7m of ETIC funds along with expanding impact to additional high-demand industry sectors and support for community colleges.
- The Hubs will coordinate local educator professional development to more effectively utilize ODE funding related to Common Core and Next Generation Science Standards implementation.
- It is envisioned that current ODE funding for CTE Revitalization, Math-Science Partnerships, the Network of Quality Teaching and Learning, and 21st Century Learning grants, will be aligned with these Priority Strategies to improve the impact of those efforts, thus saving dollars through greater efficiencies.

***(5) Who are your key partners, stakeholders, and community groups?***

Department of Education, Higher Education Coordinating Commission (HECC), Oregon Business Council, Engineering and Technologies Industries Council (ETIC), CCWD, Workforce Investment Board, the Employment Department, Early Learning Division, Oregon ASK (afterschool network), Children's Institute, and leadership from Regional STEM Hubs as well as Regional Achievement Collaboratives.

***(6) What processes were used for public input in developing the strategies?***

The STEM Investment Council made substantial efforts to solicit public input in the development of these priority strategies. In particular, a statewide "STEM Leadership Summit" was held in April of this year to specifically gather input regarding persistent systemic barriers to student achievement across the birth-to-career continuum, as well as recommended strategies for addressing those barriers. The STEM Summit was attended by ~150 representatives from K-12, universities, community colleges, business and industry, workforce and economic development, early learning, equity non-profits, and out-of-school STEM educators.

The data from the STEM Summit was synthesized into an initial draft, and was subsequently refined through two meetings with the Council and a diverse cadre of advisors representing the sectors that were at the Summit. Those meetings were well attended by additional public participants, who were invited to fully participate in the conversations.

The Strategic Investments recommended in this document were vetted and endorsed by the STEM Investment Council.

# 2015-17 STRATEGIC INVESTMENT RECOMMENDATIONS

OEIB Best Practices and Student Transitions Subcommittee

Yvonne Curtis, Mark Mulvihill, David Rives, Lynne Saxton, Kay Toran, Kim Williams

July 24, 2014

# Best Practices and Student Transitions Subcommittee 2013-14 Scope of Action

- K-12 Student Transitions
- Student Transitions 11-14
- Educator Quality
- Transforming Learning Through Digital Conversion
- Rural and Remote Communities

# Process

The Best Practices and Student Transitions Subcommittee met 11 times since October 2013.

All meetings were open to the public and documents and notes were made available on the OEIB website.

Opportunities for public testimony were provided at each meeting.

Update reports from the subcommittee were shared at each month's OEIB full board meeting and also streamed live and archived

# Strategy One

- **Spanish Benchmarking and Student Progress Monitoring Tools in Literacy**
  - The best way to understand students' current levels of literacy, progress they are making and the effectiveness of interventions is to have benchmarking and progress monitoring tools in the same language of the literacy instruction and aligned to the state summative assessment (Escamilla, K. & Coady, M., 2011; Escamilla, 1998).
  - Most standardized tests we give to students measure language proficiency and academic gains in English only; thus, we typically have little evidence to document progress (or lack of progress) in other languages.
- This investment directly addresses Strategy 2: Focusing state investment on achieving key student outcomes **and** Strategy 3: Building statewide support systems.

# Strategy 1 Outcomes:

- **Key Outcome on Achievement Compacts:**
  - Increase in the number of Spanish third graders reading on grade level in schools offering Dual Language or transitional biliteracy programs

- **Annual data used to measure improvement would include:**
  - Monitoring students' bi-literacy progress in both Spanish and English
- **A moderate investment would support:**
  - Development, piloting, and score setting of tools to determine the effectiveness of the different models for serving English Learners, a goal that is already part of the Oregon English Learners Strategic Plan approved by the OEIB in 2013

# Strategy 1 Equity Considerations:

- **How will the strategy improve outcomes for underserved and at risk populations?**
  - The Oregon Department of Education estimates there are 71 two-way Dual Language programs in the state in 70. All programs but one use Spanish as the partner language, and strive to maintain a balance of native Spanish and native English speakers in each class. Almost 70% of the dual language programs offered are in elementary schools, reaching an estimated 1400 students.
- **What evidence do you have the strategy will be successful?**
  - Research shows that among Spanish speakers, if we can assess students in-Spanish, we can often see that they have developed literacy skills that they have not yet been able to transfer to English. This allows districts to monitor students' progress in developing literacy, and use the assessment outcomes to help students transfer their literacy skills into English as well. (August, D. and Shanahan, T., eds., 2006; Escamilla, 1998; Slavin, R. and Cheung, A., 2005).

# Strategy 1 Equity Considerations:

- **How does strategy align to Equity Lens?**

  - **We believe** that everyone has the ability to learn and that we have an ethical responsibility and a moral responsibility to ensure an education system that provides optimal learning environments that lead students to be prepared for their individual futures.

  - **We believe** that speaking a language other than English is an asset and that our education system must celebrate and enhance this ability alongside appropriate and culturally responsive support for English as a second language.

# Strategy 1 Other Considerations:

- Staff in the Education Equity Unit at the Oregon Department of Education are already providing support and technical assistance to Oregon's districts seeking to expand or improve their two-way dual language programs. They will provide ongoing guidance on the use of any benchmarking and progress monitoring tools provided to teachers.

- The Oregon Department of Education is currently negotiating a contract for the use of a summative instrument as a means to measure Spanish language outcomes on an annual basis, beginning in grade 3 and is encouraging participating schools to assess students in grades 1 and 2 as well.

- Oregon has several key researchers who are helping to build and study the outcomes of Oregon's Dual Language programs.

# Strategy 1 Other Considerations

- In 2013, OEIB adopted a statewide Strategic Plan charging the Oregon Department of Education with implementing the following goals:
  - Ensure valid use of assessment data that provide accurate and understandable reports to a variety of users.
  - Expand access to valid and reliable assessment tools that are appropriate to each program model.

# Strategy Two

- Strategy 2: Continued focus on Recruitment and Retention of a More Diverse Educator Workforce
  - In 2013, Oregon's students of color made up more than one-third of the K-12 population but only 8.3% of Oregon's teacher workforce was non-white with the most notable difference between Latino students (21.5%) and Latino teachers (3.6%). We have not yet made significant progress in closing this demographic gap.
  - In addition, rural, remote, and "frontier" school districts report continued challenges in recruiting, hiring, and retaining teachers and administrators and their ability to diversify their educator workforce is even more hampered than their more urban counterparts.
  - This investment directly addresses Strategy 3: Building statewide support systems.

# Strategy 2 Outcomes:

## Key Outcomes on Achievement Compacts:

1) Increase in non-white, Hispanic or non-Native English educators, and
2) Increased educator satisfaction with professional support.
3) Student learning outcomes on the Achievement Compacts are also dependent to a great degree on teachers.

## Annual data used to measure improvement include:

- Educator preparation applicants, enrollees, and program completers who are culturally and linguistically diverse
- Number of culturally and linguistically diverse educators employed and retained in Oregon public schools by district
- Annual supply and demand data

## A substantial investment would support:

- Tuition and stipends for up to 100 minority teacher candidates attending  Oregon educator preparation programs as well as 7-8 retention projects in both rural and urban communities.

# Strategy 2 Equity Considerations:

- **How will the strategy improve outcomes for underserved and at risk populations?**
  - Educators of color serve as cultural brokers, not only helping students navigate their school environment and culture, but increasing involvement of families and communities of color which in turn impacts student attendance, achievement, graduation rates and postsecondary aspirations.

- **What evidence do you have the strategy will be successful?**
  - A study by Clewell et al. (2005) showed an increase in the reading and mathematics scores of African American and Spanish-speaking elementary students at 4th and 6th grade when taught by a teacher of their same ethnicity.

  - Two studies using longitudinal data showed that students of color who engaged with a diverse educator workforce had higher achievement test scores in reading (Easton-Brooks et al., 2010) and mathematics (Eddy & Easton-Brooks, 2011) than students who did not have at least one teacher of the same race between kindergarten and 5th grade**.**

# Strategy 2 Equity Considerations:

- **How does strategy align to Equity Lens?**
  - **We believe** that the students who have previously been described as “at risk,” “underperforming,” “under-represented,” or minority actually represent Oregon’s best opportunity to improve overall educational outcomes. We have many counties in rural and urban communities that already have populations of color that make up the majority. Our ability to meet the needs of this increasingly diverse population is a critical strategy for us to successfully reach our 40/40/20 goals.

  - **We believe** in the importance of supporting great teaching. Research is clear that “teachers are among the most powerful influences in (student) learning.

# Strategy 2 Other Considerations:

OEIB is responsible for creating and supporting a statewide plan for increasing the successful recruitment of high-ability and culturally diverse candidates to work in high-need communities and fields. This strategy supports two of the goals of HB 3233:

- Advance the profession of teaching among providers of early learning services, teachers and administrators in kindergarten through grade 12, and
- Improve recruitment, preparation, induction, career advancement opportunities and support of educators.

During the 2013 Legislative Session, Senate Bill 755 (Appendix A) amended the original Minority Teacher Act passed in 1991 with a revised goal for 2015 and changed the definition of “Minority” to include educators whose first language is not English. OEIB is coordinating the data collection/analysis and promoting nationally recognized strategies.

# Strategy 2 Other Considerations:

It is critical that in addition to recruitment and retention efforts, hiring and placement procedures and practices are analyzed and those responsible for hiring receive training in cultural responsiveness and implicit bias.

The OEIB will continue to lend staffing support to the Oregon Educator Equity Advisory Group and assist in the development and use of an Educator Equity Score Card.

In 2014-15, the OEIB will coordinate efforts with research organizations to study the experiences and perceptions of teachers of color who maintain their licenses with TSPC but are not employed in Oregon public schools. These results will be used to effect changes in practice.

Oregon Education Investment Board

**BEST PRACTICES AND STUDENT TRANSITIONS**
2015-17 BUDGET RECOMMENDATIONS

The Oregon Education Investment Board (OEIB) Best Practices and Student Transitions (BPST) Subcommittee is charged with recommending best practices, policies and strategic investments that support student success with particular focus on transition points such as entry into Kindergarten, K-12 transitions and high school to post-secondary and career. The 2013-14 BPST Subcommittee's Scope of Action focused on five areas:

1. K-12 Student Transitions (including Early Learning transitions into Kindergarten)
2. Student Transitions 11-14
3. Educator Quality
4. Transforming Learning Through Digital Conversion
5. Rural and Remote Communities

After a process that engaged subcommittee members on a monthly basis in reviewing Oregon data and policies, evidence-best practices, and testimony from state agencies, community organizations and Oregon citizens, this document recommends one of the two priorities recommended by the BPST Subcommittee for consideration by the OEIB Outcomes and Investments Subcommittee for Strategic Investments for the 2015-17 biennium.

## Strategy 1:

In support of the state's goal to increase third grade reading proficiency, the BPST recommends the Oregon Department of Education (ODE) contract with a provider to develop appropriate Spanish benchmarking and progress monitoring tools for students who are receiving literacy instruction in Spanish in both transitional bilingual programs and Dual Language programs. We have growing numbers of students receiving Spanish literacy instruction in both transitional bilingual and Dual Language programs and both models have been shown to be more effective than pull-out English Language Development programs (Collier; Collier & Gomez; Lindholm-Leary, K.J., 2007; Thomas, W.P., & Collier, V.P., 2012).

The only way to understand students' current levels of literacy, progress they are making and the effectiveness of interventions is to have both the benchmarking and progress monitoring assessments in the same language of the literacy instruction. Many

schools are using a Response to Intervention model that is enabling schools to effectively apply interventions specific to students' needs and adjust them quickly when needed. Schools need tools that are in both Spanish and English that are aligned to the state summative assessment (Escamilla, K. & Coady, M., 2011; Escamilla, 1998).

Because most standardized tests we give to students measure language proficiency and academic gains in English only, we typically have little evidence to document progress (or lack of progress) in other languages. Although Oregon has adopted the Common Core State Standards, we are lacking instruments that can provide Spanish assessments aligned to these standards.

## Strategy 1: _____

### *(1) How does the strategy align with the OEIB's 2015-17 Budget Strategies & Priorities? Is the strategy related to repurposing, reallocating or allocating funds differently?*

A one-time investment in Spanish benchmarking and progress and monitoring tools will facilitate the progress of English Learners whose first language is Spanish; thus focusing on improving key student outcomes (OEIB 2015-17 Budget Strategy #2).

### *(2) How will the strategy lead to improvement on the key outcomes identified by the OEIB, such as those identified in Achievement Compact or early learning hub requirements?*

One of the key metrics on the Achievement Compacts is increasing the number of 3rd graders who read at or above third grade level. This of course includes many students for whom English is not their native language. Over 55,000 students or 10% of Oregon's student population report a language other than English as their language of origin. And, over 75% of Oregon's English Learners speak Spanish. Although most English Learners are not served in bilingual programs, an increasing number of them are. Most promising is the expansion of two-way dual language programs in Oregon, providing English Learners with the most effective model for achieving academic success. These are programs that serve native Spanish and native English speakers, that currently operate in at least 70 schools in Oregon and that enroll approximately 8400 elementary students, about half of which are Spanish speaking English Learners. Additional Spanish speaking English learners in Oregon are enrolled in transitional and other types of bilingual programs, however, the data on these other bilingual programs and the students enrolled in them are not currently reliable. (The Oregon Department of Education is in the process of improving the data collection on all EL program models and expects to have more reliable data on all EL program models and students served in the spring of 2015.)

With the data from these tools, ODE will be able to determine the effectiveness of the

different models for serving English Learners, a goal that is already part of the Oregon English Learners Strategic Plan approved by the OEIB in 2013.

### *(3) How does this strategy demonstrate the priorities and values expressed in the OEIB equity lens?*

The attainment of a quality education strengthens all Oregon communities and promotes prosperity, to the benefit of us all. Our ability to meet the needs of Oregon's increasingly diverse population is a critical tactic for us to successfully reach our 40/40/20 goals. This strategy aligns with several core elements of the Equity Lens.

**We believe** that everyone has the ability to learn and that we have an ethical responsibility and a moral responsibility to ensure an education system that provides optimal learning environments that lead students to be prepared for their individual futures.

**We believe** that speaking a language other than English is an asset and that our education system must celebrate and enhance this ability alongside appropriate and culturally responsive support for English as a second language.

**We believe** that resource allocation demonstrates our priorities and our values and that we demonstrate our priorities and our commitment to rural communities, communities of color, English language learners, and out of school youth in the ways we allocate resources and make educational investments.

### *(4) What evidence indicates these strategies will result in improvement?*

Research shows that among Spanish speakers, if we can assess students in-Spanish, we can often see that they have developed literacy skills that they have not yet been able to transfer to English. This allows districts to monitor students' progress in developing literacy, and use the assessment outcomes to help students transfer their literacy skills into English as well. (August, D. and Shanahan, T., eds., 2006; Escamilla, 1998; Slavin, R. and Cheung, A., 2005).

This strategy will improve instruction by helping teachers determine appropriate interventions, assess the effectiveness of the interventions, make adjustments, and determine the progress of students in these programs.

Research demonstrates that good bilingual programs that are designed to promote bilingualism, bi-literacy, and academic achievement, do a better job at preparing English learners (ELs) for academic success than do transitional bilingual programs or ESL programs; however, research also shows that these impacts tend to appear several

years after students have been enrolled in them **(**Goldenburg, C., 2008; Lindholm-Leary, K.J., 2007; Thomas, W.P., & Collier, V.P., 2012).

### *(5) At various levels of investment (modest, medium, substantial), what will the state be "buying"? What impact will this have on measurable results described above?*

The Oregon Department of Education estimates there are 71 two-way Dual Language programs in the state in 70 districts. All programs but one use Spanish as the partner language, and strive to maintain a balance of native Spanish and native English speakers in each class. Almost 70% of the dual language programs offered are in elementary schools, reaching an estimated 1400 students. Development of benchmarking tools in Spanish will help teachers monitor development of key assessment skills and progress towards 3rd grade literacy goals.

If the state owned the assessment, districts would be able to more readily offer the assessment to their students receiving Spanish instruction because the test would be much more affordable. When a vendor owns the assessment, districts must pay testing fees, typically on a per student basis, for test materials and administration manuals, and sometimes for scoring and reporting services as well. This is the case for schools using easyCBM, DIBELS, or existing Spanish assessments like Aprenda, PODER, or Supera. Some districts that offer Spanish dual language programs have already begun investigating Spanish assessment options; some can afford the additional testing fees for at least a portion of their students; others cannot. Thus it is preferable if the state owns the assessment and can provide the test at no charge to districts.

### *(6) What other conditions, supports and/or changes are needed for the strategy to be successful?*

Oregon's Dual Language Grant provides Oregon with a unique opportunity to develop and expand quality dual language programs across the state and to build into these programs convincing, objective measures of student growth in both target languages. The Oregon Department of Education is currently negotiating a contract for the use of a summative instrument as a means to measure Spanish language outcomes on an annual basis, beginning in grade 3 and is encouraging participating schools to assess students in grades 1 and 2 as well. In addition to offering a reliable and valid summative assessment for dual language programs to use, the Department would like to see benchmarking and progress monitoring assessments developed that are explicitly aligned to the summative assessment and the Spanish language standards upon which the summative assessment would be based.

There will be a need for continued research on EL program models in general, and specifically dual language models. Fortunately, ODE is building a foundation for

research on dual language programs in Oregon with the assistance of Dr. Kathryn Lindholm-Leary, a professor at San Jose State University and expert on dual language program research. With her assistance, the Dual Language/Two-Way Bilingual grant sites are setting up data collection systems and research plans that will assist us in documenting program start-up. Also, Dr. Karen Thompson at Oregon State University has received a federal grant to examine Oregon's long-term EL outcomes based on a variety of factors including EL program model.

### *(7) Are there state or federal policy or activities that could impact costs and/or success of strategy? In what ways?*

The Strategic Investment funds enabled ODE to invest in the expansion and improvement of dual language programs in Oregon that is laying a solid foundation for long-term academic success for the English Learners and English speakers enrolled in these programs. The success of this initiative will be enhanced by sustained professional development, capacity building, and research that provides meaningful evaluations of programs to ensure high quality program delivery.

## PART 2: Describe Conditions, Processes & Partners (No more than 2 pages)

### *(1) What do you need from other agencies / boards / groups to enable you to be most effective?*

Staff in the Education Equity Unit at the Oregon Department of Education are already providing support and technical assistance to Oregon's districts seeking to expand or improve their two-way dual language programs. They will provide ongoing guidance on the use of any benchmarking and progress monitoring tools provided to teachers.

### *(2) What can your agency / board / group offer to other parts of the system to aid in alignment & transformation?*

Staff at ODE should work with the Early Learning Division to ensure alignment between the Kindergarten Readiness Assessment and proposed benchmarking and monitoring.

### *(3) Which strategies that you know are priorities for other agencies/boards/groups would enable you to achieve your results (better, faster, etc.), if any?*

In 2013 OEIB adopted a statewide Strategic Plan charging the Oregon Department of Education with implementing the following goals:

- Ensure valid use of assessment data that provide accurate and understandable reports to a variety of users.
- Expand access to valid and reliable assessment tools that are appropriate to each program model.

The Oregon Department of Education has identified the measurement of Spanish literacy skills that correspond to college and career ready academic standards as a state priority using valid and reliable instruments for monitoring the Spanish literacy development of students enrolled in K-12 Spanish/English dual language programs.

Supporting multilingualism prepare our students to successfully compete in a 21st Century global economy. California New York, Illinois, and Washington have begun offering state seals of biliteracy on high school diplomas. Working with local stakeholders, ODE is hoping to develop a biliteracy seal that will honor biliteracy skills high school graduates have acquired and that future employers and college admissions offices will recognize and reward.

### *(4)* ***Please identify at least one strategy for reducing costs or repurposing resources in your agency or policy area****.*

The existing dual language/two-way bilingual grant has helped lay a solid foundation for the expansion and improvement of these programs, and for long-term research on EL program effectiveness. This includes ODE assistance in identifying and paying for an appropriate Spanish summative assessment to document Spanish literacy development of Spanish, collaborations with university researchers to examine short-term and long-term EL program outcomes, and ODE leadership on bilingual teacher competencies, and dual program design and implementation.

There could also be additional cost leveraging if the strategy further developed or adapted already existing measures in English K-8 and in Spanish.

### ***(5) Who are your key partners, stakeholders, and community groups?***

Oregon Department of Education

- Regional Achievement Collaboratives and Early Learning Hubs
- School districts with dual language programs
- Community organizations (e.g. Salem Keizer Coalition for Equality, Adelante Muleres from Forest Grove)

### ***(6) What processes were used for public input in developing the strategies?***

The Best Practices and Student Transitions Subcommittee met 11 times since October 2013. All meetings were open to the public and documents and notes were made available on the OEIB website. Opportunities for public testimony were provided at each meeting. Update reports from the subcommittee were shared at each month's OEIB full board meeting and also streamed live and archived.

Subcommittee members heard eight presentations related to early literacy and English Learners including:

- David Bautista, Education Equity Unit Assistant Superintendent, Oregon Department of Education
- Brian Reeder, Office of Research and Data Analysis Assistant Superintendent, Oregon Department of Education
- Linda Herrera, Dean of Student Retention and College Life, Chemeketa Community College
- Julie Haun, Director of the PSU Intensive English Language Program
- Jada Rupley, Director of Oregon Early Learning Division,
- Brett Walker, Education Specialist, Early Learning Division
- Kara Williams, Early Education Specialist, Early Learning Division
- Serena Stoudamire-Wesley, OEIB Director for Early Transitions, Equity and Community
- Mary Alice Russell, Superintendent of McMinnville School District
- Toya Fick, Government Affairs Director of Stand for Children

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Oregon Education Investment Board

# BEST PRACTICES AND STUDENT TRANSITIONS
## OUTCOMES & INVESTMENTS SUBCOMITTEE
## 2015-17 BUDGET RECOMMENDATIONS

*"Districts can't increase minority and bilingual staff if they are not being produced through Oregon colleges. Colleges can't produce graduates if these students don't have the financial means to attend college."*

*"We need a collective response in terms of recruitment. We have amazing, culturally diverse kids who cannot find a viable financial path to college and through a teacher preparation program."*

*"There are many minority and bilingual students who have the potential in all of these areas if we tap into wasted talent in these students who do not presently have a path to college. Let's support students who meet high standards and have the needed dispositions for teaching by providing access to college".*

*"It is difficult for smaller, rural isolated areas to create incentives for teachers to consider our areas. A broader loan forgiveness program would assist in these efforts."*

*"A statewide pay scale would be helpful for our District as we have a difficult time competing with larger school districts."*

Comments from Oregon District Human Resource Officers
on a 2014 Oregon School Personnel Association Survey

The Oregon Education Investment Board (OEIB) Best Practices and Student Transitions (BPST) is charged with recommending best practices, policies and strategic investments that support student success with particular focus on transition points such as entry into Kindergarten, K-12 transitions and high school to post-secondary and career. The 2013-14 BPST Subcommittee's Scope of Action focused on five areas:

1. K-12 Student Transitions ((including Early Learning transitions into Kindergarten)
2. Student Transitions 11-14
3. Educator Quality
4. Transforming Learning Through Digital Conversion
5. Rural and Remote Communities

After a process that engaged subcommittee members on a monthly basis in reviewing Oregon

data and policies, evidence-best practices, and testimony from state agencies, community organizations and Oregon citizens, this document recommends the top two priorities for consideration by the OEIB Outcomes and Investments Subcommittee for Strategic Investments for the 2015-17 biennium.

## Strategy 2:

Research is clear that "teachers are among the most powerful influences in (student) learning.[1]"2 Given the need for a culturally and linguistically high quality educator workforce in Oregon, we support continued funding in 2015-17 to recruit and retain more culturally and linguistically diverse teachers via a strategic investment with specific attention to the workforce needs of "frontier[2]" and rural districts.

When the Oregon Department of Education released the Minority Teacher Pipeline and Retention Request for Proposals funded by HB 3233, they received more applications than could be funded. They were able to fund seven of the sixteen proposals received. The impact of the allocated funding (close to $700,000) falls short in addressing the gap that exists between the demographics of Oregon students and educators. In 2013, Oregon's students of color make up more than one-third of the K-12 population but only 8.3% of Oregon's teacher workforce is non-white. The most notable difference exists between Latino students (21.5%) and Latino teachers (3.6%).

In addition, rural, remote, and "frontier" school districts report continued challenges in recruiting, hiring, and retaining teachers and administrators and their ability to diversify their educator workforce is even more hampered than their more urban counterparts. To date, there have been no significant resources focused on this issue and the Oregon School Personnel Association warns that the crisis will be even more pronounced given the increased hiring being found in more urban districts during the coming year.

### Strategy 2: _____

*(1) How does the strategy align with the OEIB's 2015-17 Budget Strategies & Priorities? Is the strategy related to repurposing, reallocating or allocating funds differently?*

A continued investment in recruitment and retention of a more culturally and linguistically high quality Oregon educator workforce with a particular focus on the unique issues of rural, remote, and frontier districts is focused on building statewide support systems (OEIB 2015-17 Budget Strategy #3). Per HB 3233, OEIB is responsible for creating and supporting a statewide plan for increasing the successful recruitment of high-ability and culturally diverse candidates to work in high-need communities and fields.

[1] Hattie, J. (2009), *Visible learning: A synthesis of over 800 meta-analyses relating to student achievement. P. 238.*

[2] Frontier areas are sparsely populated rural areas that are isolated from population centers and services.

This strategy also complements two specific goals of HB 3233 to:

1. Advance the profession of teaching among providers of early learning services, teachers and administrators in kindergarten through grade 12, and
2. Improve recruitment, preparation, induction, career advancement opportunities and support of educators.

### *(2) How will the strategy lead to improvement on the key outcomes identified by the OEIB, such as those identified in Achievement Compact or early learning hub requirements?*

Student learning and success is dependent to a great degree on having a high quality teacher in every classroom. Although the effects of the economic recession in Oregon continue to linger, school districts are receiving more resources and a heightened job market for educators is being reported. This increased demand has been precipitated by several factors. (1) Replacement of positions lost during the recession; (2) Increased retirements caused by recent changes to PERS as well as deferred retirements caused by the recession and concern for health insurance coverage; and (3) Pressures to reduce class size in an effort to improve student performance.

Unfortunately, data from the Oregon Department of Education shows that there were 43 fewer teachers of color employed in Oregon public schools in 2013-14 than the year before. This represents approximately a 2% drop for the state's minority teacher workforce. In fact, it is estimated that an additional 229 culturally and linguistically diverse teachers would need to be employed in Oregon public schools to meet the July 2015 goal established in Senate Bill 755.

Furthermore, 65% of the districts responding to a survey administered by the Oregon School Personnel Association identified that candidates' geographic preference is an obstacle to hiring new educators willing to locate or relocate to more remote areas of the state.

Thirty-seven percent of the districts responding to the survey noted that Oregon needs a more adequate pool of bilingual candidates, 33% recommended that Oregon create a statewide application system for candidates, and 28% responded saying Oregon needs to increase the pool of educators of color.

The number one recommendation to OEIB from the districts responding to the survey was to support recruitment of educators for rural Oregon and schools of high poverty (i.e. financial incentives, mentoring programs, & a focus on geographic equity).

### *(3) How does this strategy demonstrate the priorities and values expressed in the OEIB Equity Lens?*

The racial and cultural diversity in Oregon has increased dramatically over the past ten years, adding great richness to our classrooms and communities and posing new challenges for our schools as they attempt to meet the needs of an increasingly culturally, racially and linguistically varied student population.

The Oregon Equity Lens has helped us further analyze the racial and ethnic diversity among our

education workforce serving Oregon students in the K-12 system.

### *(4) What evidence indicates these strategies will result in improvement?*

A study by Clewell et al. (2005) showed an increase in the reading and mathematics scores of African American and Spanish-speaking elementary students at 4th and 6th grade when taught by a teacher of their same ethnicity.

Two studies using longitudinal data showed that students of color who engaged with a diverse educator workforce had higher achievement test scores in reading (Easton-Brooks et al., 2010) and mathematics (Eddy & Easton-Brooks, 2011) than students who did not have at least one teacher of the same race between kindergarten and 5th grade.

Educators of color also serve as cultural brokers, not only helping students navigate their school environment and culture, but increasing involvement of families and communities of color which in turn impacts student attendance, achievement, graduation rates and postsecondary aspirations.

### *(5) At various levels of investment (modest, medium, substantial), what will the state be "buying"? What impact will this have on measurable results described above?*

| | Modest | Moderate | Substantial |
|---|---|---|---|
| | Modest funding might result in perhaps three pipeline projects producing close to 30-40 new candidates and retention of close to 80 teachers in 3-4 districts and convening of rural HR staff for a planning meeting | Moderate funding might result in six pipeline projects producing close to 60-80 new candidates, 3 -4 district retention projects and at least two rural teacher recruitment and retention projects | Substantial funding could result in tuition and stipends for up to 200 minority teacher candidates attending an Oregon educator preparation program as well as 6-8 retention projects in both rural and urban communities. |

Repurposing of a portion of the $33 million that is to be transferred biennially from the State School Fund per HB 2506 could be a source of additional funding beyond the $500,000 designated in 2013-14.

### *What other conditions, supports and/or changes are needed for the strategy to be successful?*

It is critical that hiring and placement procedures and practices are analyzed and those responsible for hiring receive training in cultural responsiveness and implicit bias. And as systems across Oregon are finding ways to recruit a more culturally and linguistically diverse teaching staff, the issue of retention becomes a much larger piece of the puzzle. The greatest

recruitment efforts mean little if diverse populations of teachers do not feel a connection to the school and community in which they work and live. Results from the 2013-15 retention projects and TeachOregon are helping to identify best practices that can be part of training provided at the school district level around recruitment, hiring, and retention.

*(6) Are there state or federal policy or activities that could impact costs and/or success of strategy? In what ways?*

The Obama administration is asking states to create plans ensuring that all students have access to effective teachers - and it will publish a list of states where children from minority and low-income families aren't getting their fair share of these teachers this fall.

## PART 2: Describe Conditions, Processes & Partners (No more than 2 pages)

*(1) What do you need from other agencies / boards / groups to enable you to be most effective?*

A challenge in increasing the number of teachers of color resides is the fact that less than 10% of college students of color elect education as their major. Boser (2011) recommends statewide initiatives to fund teacher preparation programs aimed at teachers of color.

The Higher Education Coordination Commission could require annual goals and reports that indicate how public universities prioritize recruiting and supporting culturally and linguistically diverse teacher candidates.

*(2) What can your agency / board / group offer to other parts of the system to aid in alignment & transformation?*

The OEIB will lead coordination of efforts across state agencies to accurately compile, analyze, and report data for the Oregon Minority Teacher Report so that the results of strategic investments can be measured against the progress towards the July 2015 goals outlined in SB 755.

The OEIB will continue to lend staffing support to the Oregon Educator Equity Advisory Group and assist in the development and use of an Equity Score Card.

The OEIB will coordinate efforts with research organizations to study the experiences and perceptions of teachers of color who maintain their licenses with TSPC but are not employed in Oregon public schools.

*(3) Which strategies that you know are priorities for other agencies/boards/groups would enable you to achieve your results (better, faster, etc.), if any?*

As Oregon seeks to diversify the education profession and to decrease the academic achievement

gap between students of color and white students, it is critical that a statewide collective action involve classroom teachers, building administrators, school district personnel, community organizations, educator preparation programs, state agencies and policymakers. Each of the initiatives listed in this section grew out of attention driven by the Network for Quality Teaching and Learning, amendments to the Minority Teacher Act, and increased attention on the importance of retaining educators but still fall short in addressing the complexity of issues surrounding recruitment, hiring, and retention of culturally and linguistically diverse candidates. And none of these efforts were focused on the specific needs of rural, remote, and "frontier" school districts workforce challenges.

Senate Bill 755 During the 2013 Legislative Session, Senate Bill 755 (Appendix A) amended the original Minority Teacher Act passed in 1991 with a revised goal for 2015 and changed the definition of "Minority" to include educators whose first language is not English. A status report completed in July 2014 noted that these data are not currently collected or available for analysis but steps are now been taken by ODE, the OUS, and TSPC to collect these statistics for inclusion in the full report due July 1, 2015.

Oregon Education Equity Advisory Group Members of this group are representative of the changing demographics in Oregon. In addition to overseeing the Minority Teacher Report, they have charged themselves with assessing, evaluating, and advocating for statewide educational policy that prepare, recruit, and retain racially, ethnically and linguistically diverse educators that contribute to the continuing success of diverse students, teachers, families, and communities. The group is also developing an Equity Score Card that will be used to monitor aspects of workforce diversity, leadership, workplace climate, leadership opportunities, and retention efforts.

Pipeline and Retention Grants As a result of House Bill 3233 and the Network for Quality Teaching and Learning, Oregon has awarded over $700,000 in partnerships focused specifically on recruitment, preparation, and retention activities that will report results by July 2015. By July 2015, the pipeline grants are projected to increase the number of culturally and linguistically diverse candidates eligible for employment by 42 with the three retention projects improving retention in three districts by 10- 15%.

TeachOregon In addition, HB 3233 funded two additional projects within TeachOregon Projects, a Chalkboard Project initiative that now supports five partnerships involving 13 school districts, 7 universities and 4 community colleges. Each project is implementing improved models for preparing the next generation of teachers and addressing the lack of diversity in the educator workforce with goals of increasing by 10% the number of minority candidates graduating from Oregon teacher preparation programs.

Educational Assistant Pathways HB 3254 charged the Oregon Education Investment Board (OEIB) with developing recommendations around career pathways for educational assistants (EAs) to become licensed teachers. The report has recommended three options to legislators that could slowly increase the number of culturally and linguistically diverse educational assistants available for teaching positions.

OSPA Survey and Best Practices The Oregon School Personnel Association (OSPA) is now

annually surveying districts hiring needs and identifying and sharing best practices known to help retain educators. The OSPA Executive Director reports that the need for teachers and administrators in Oregon's rural and remote communities is reaching a more acute level of need due to increased hiring by all districts, many of which are able to offer more competitive salaries.

Oregon Educator Recruitment Website A plan for a statewide recruitment website is underway that would provide clear and useful information allowing prospective candidates to compare and contract program options and design a customized plan that includes needed supports.

### *(4) Please identify at least one strategy for reducing costs or repurposing resources in your agency or policy area.*

Closing the gap between educator and student demographics holds promise for improving student achievement and ultimately reducing costs related to remediation, grade retention, and high school dropouts. Research by Donald Easton-Brooks found that African American students who had at least one African American teacher between kindergarten and 5th grade scored 1.50 points higher in reading than those students who did not have at least one African American teacher at the end of kindergarten. The reading scores of these students increased 1.75 points per year higher than those students who did not have at least one African American teacher between kindergarten and 5th grade. Similarly, Eddy and Easton-Brooks (2011) found that students who were exposed to at least one African American teacher scored 1.44 points higher on the mathematics achievement test at the end of kindergarten and the growth in the mathematics scores of these students was at least 0.64 points higher than those students not exposed to an African American teacher between kindergarten and fifth grade.

In addition, every time an Oregon teacher leaves the profession, it contributes to a growing cost of teacher turnover, estimated currently at $40 million a year.

### *(5) Who are your key partners, stakeholders, and community groups?*

Oregon Educator Equity Advisory Group
Coalition of Communities of Color
Oregon Coalition for Quality Teaching and Learning
Teacher Standards and Practices Commission
Oregon School Personnel Association
Chalkboard Foundation
Oregon Education Association
Oregon Association of Colleges for Teacher Education
Confederation of School Administrators

### *(6) What processes were used for public input in developing the strategies?*

The Best Practices and Student Transitions Subcommittee met 11 times since October

2013. All meetings were open to the public and documents and notes were made available on the OEIB website. Opportunities for public testimony were provided at each meeting. Reports from the subcommittee were shared at each month's OEIB full board meeting that was also streamed live and archived.

Subcommittee members heard presentations from nine individuals related to educator quality including:

- Gary Blackmer, Secretary of State's Director of Audits Division,
- Victoria Chamberlain, Executive Director, Teacher Standards and Practices Commission
- Keith Menk, Deputy Director, Teacher Standards and Practices Commission
- Hilda Rosselli, OEIB Director of College and Career Readiness
- Vicki Nishioka, Oregon State Coordinator, Education Northwest
- Matthew Eide, Center for Strengthening Education Systems
- Randy Hitz, College of Education Dean from Portland State University
- Scott Fletcher, College of Education Dean from Lewis and Clark College,
- Sue Hildick, President of Chalkboard Foundation,
- Julie Smith, Rural District Collaboration Project Coach

# Network of Quality Teaching and Learning Advisory Group's 2015-17 Strategic Investment Recommendations

Presentation to OEIB Outcomes & Investment Subcommittee

July 24, 2014

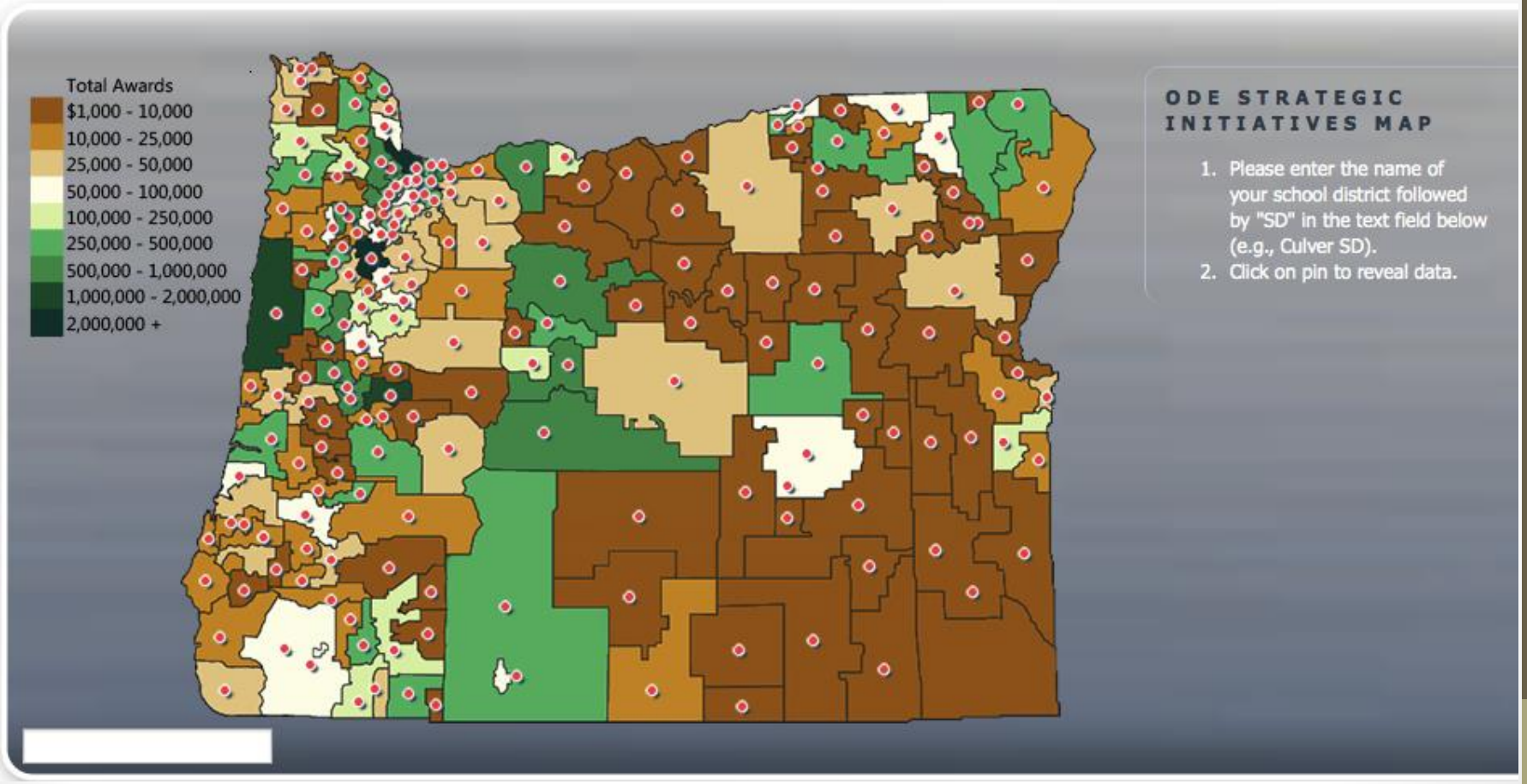
# Advisory Group's Charge

- Guiding development and review of Network outcomes
- Providing insights on local Network implementation and connections to existing efforts
- Helping scale up most effective practices
- Mobilizing the untapped potential of teachers as leaders of innovation
- Helping create efficient and effective use Network resources
- Applying known lessons frpm existing efforts in Oregon and elsewhere

# Advisory Group Members

- Mark Ankeny
- David Bautista
- Lindsay Capps
- Jim Carlile
- Frank Caropelo
- Olga Cobb
- Yvonne Curtis
- Donna Dubois
- Larry Flick
- Dan Goldman
- Don Grotting
- Whitney Grubbs
- Lisa Harlan
- Craig Hawkins
- Tony Hopson
- Betty Komp
- Michael Lasher
- Mark Lewis
- Jim Mabbott
- Inger McDowell
- Keith Menk
- Colleen Mileham
- Eric Nichols
- Krista Parent
- Kim Patterson
- Scott Perry
- Sarah Pope
- Bev Pratt
- Theresa Richards
- Hilda Rosselli
- Jada Rupley
- Heidi Sipe
- Diane Smith
- Johnna Timmes
- Peter Tromba
- Anthony Veliz

# Network for Quality Teaching and Learning




- Interactive Map of Network of Quality Teaching and Learning Strategic Investments

Feedback from stakeholders affirms that it is still too early to gauge the full impact of the Network investments on educator quality and ultimately student outcomes. They have emphasized the need to "stay the course" with the work that is still getting underway. They support continued tracking of progress, expansion and scaling up of effective practices shown to make a difference for students, and more investments in time for teachers to implement what works.

# Overview of the Strategies

- Strategy 1 Full State Access to Mentoring
- Strategy 2 Regional Capacity Building
- Strategy 3 Expansion of School District Collaboration
- Strategy 4 Educator Preparation
- Strategy 5 Culturally Responsive Teaching Practices

- Continue development of the Network website/portal to connect educators
- Process for gathering, analyzing, and disseminating outcome data and proven practices to support further statewide implementation.

# Strategy One



- Full State Access to Mentoring
  - Scaling up mentoring to reach 100% of all new teachers and administrators employed in Oregon and supporting local flexibility that ensures program fidelity based upon the state's mentoring standards.

- This investment directly addresses Strategy 3: Building statewide support systems.

# Strategy 1 Outcomes:

- **Key Outcome on Achievement Compacts:**
  - Student learning outcomes on the Achievement Compacts are dependent to a great degree on teachers.
- **Annual data used to measure improvement would include:**
  - Mentoring data includes data from mentees, mentors, and impact on teacher retention
  - Increased educator satisfaction with professional support using the TELL survey results
  - Increased retention of educators who are culturally and linguistically diverse and meeting state goals
- **A substantial investment would support:**
  - two years of statewide coverage of high-quality mentoring for every new teacher and administrator hired in an Oregon public school.

# Strategy 1 Equity Considerations:

Full State Access to Mentoring

- **How will the strategy improve outcomes for underserved and at risk populations?**
  - Students from underserved and at risk populations are most likely to be impacted by teacher turnover and can suffer significant academic losses when experiencing low quality teaching for three years in a row.
- **What evidence do you have the strategy will be successful?**
  - Studies show that teachers who receive high-quality induction programs stay in the profession at significantly higher rates, accelerate new teachers' professional growth, and improve student learning.
- **How does the strategy align to Equity Lens?**
  - **We believe** in the importance of supporting great teaching. Research is clear that “teachers are among the most powerful influences in (student) learning.

# Strategy 1 Other Considerations:

- Increasing investments in Oregon's Mentoring program can reduce the cost of teacher turnover, sometimes estimated as high as $40 million a year in Oregon.
- Results for investments in new educator mentoring should also track that rate at which recipients achieve tenure or move beyond probational status.
- Although it is still too early to ascertain the impact of online mentoring options made available to small and remote districts, results should be analyzed and shared when they become available.

# Strategy Two



- Strategy 2: Regional Capacity Building
  - Engagement of educators to plan their local use of Network funds to implement Common Core State Standards and Educator Effectiveness models to improve student outcomes and address needs identified from Teaching, Empowering, Leading and Learning (TELL) survey results and Professional Learning Team (PLT) plans.

- This investment directly addresses Strategy 3: Building statewide support systems.

# Strategy 2 Outcomes:

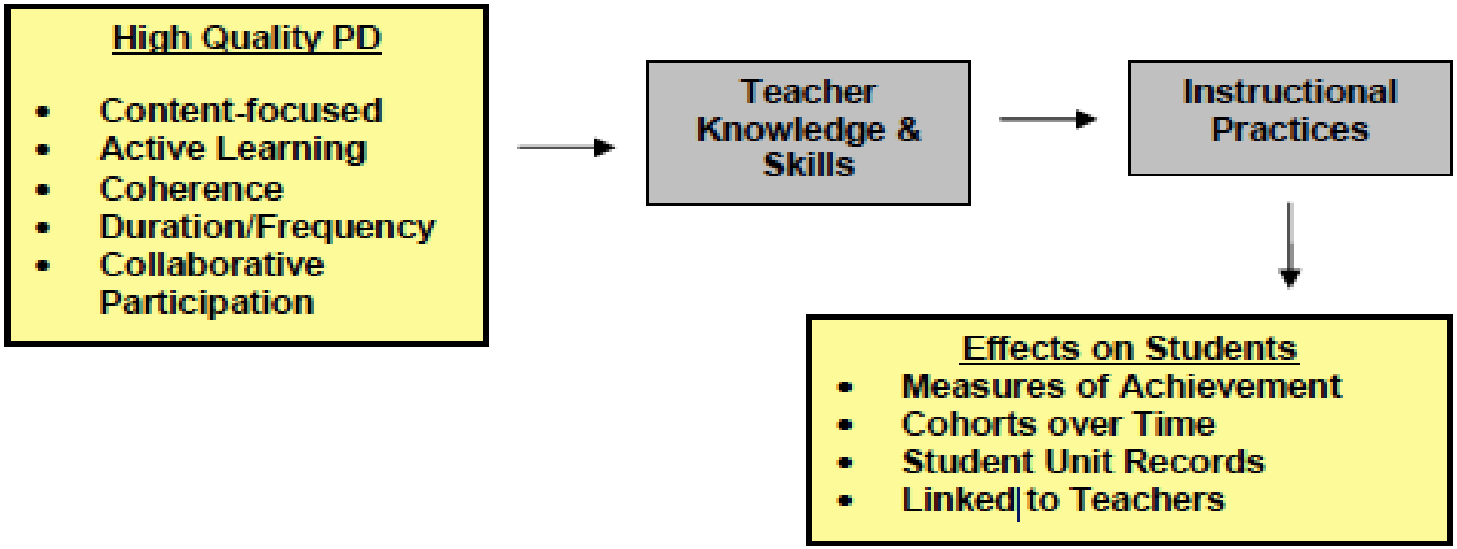
- **Key Outcome on Achievement Compacts:**
  - Student learning outcomes on the Achievement Compacts are dependent to a great degree on teachers.

- **Annual data used to measure improvement would include:**
  - The OEIB Scorecard is using the TELL Survey to monitor educator satisfaction with professional support.
  - In addition, more extensive use of the Tripod Survey (Ferguson, 2009) could provide a sustainable means of measuring impacts of Network investments on students' school experiences.

- **A substantial investment would support** increased student learning outcomes as a result of substantial improvements in teacher and leader effectiveness

# Theory of Action

Regional Capacity Building




Logic Model Used by the Council of Chief State School Officers

# Strategy 2 Equity Considerations:

Regional Capacity Building

- **How will the strategy improve outcomes for underserved and at risk populations?**
  - The MET Project found that *Tripod* surveys are predictive of student achievement gains and are a stable, reliable measure of effective teaching.

- **What evidence do you have the strategy will be successful?**
  - A 2009 meta-analysis on the effects of teacher professional development on improvement of student learning showed that professional development for teachers can result in changes in teacher behavior and student achievement when the PD is characterized by collective participation, when continuing learning reinforcement activities are offered after the initial period of teacher training, and when there is extensive use of strategies including coaching, mentoring, internship, professional networks, and study groups (Blank & de las Alas, 2009).

- **How does the strategy align to Equity Lens?**
  - **We believe** in the importance of supporting great teaching. Research is clear that "teachers are among the most powerful influences in (student) learning.

# Strategy 2 Other Considerations:

- In a meta analysis conducted by Council of Chief State School Officers (CCSSO), 14 of the 18 most effective mathematics and science professional development activities that resulted in improved student achievement continued for six months or more with a mean contact time with teachers in program activities of 91 hours (Blank & de las Alas, 2009).
- Some school districts will need to re-examine the role of one-day workshops within a full spectrum of a comprehensive professional learning program that includes embedded time for coaching and collaboration.
- Escalated development and implementation of an accessible Network website/portal will maximize and document impact of the investments. External providers may be able to provide a more nimble platform and interactive tools responsive to educators' needs.
- Escalated development and implementation of an accessible Network website/portal will maximize and document impact of the investments. External providers may be able to provide a more nimble platform and interactive tools responsive to educators' needs.

# Strategy Three

- Strategy 3:School District Collaboration Grants
  - Continued funding to expand a proven practice to new districts that are interested and show a readiness to:
    - align and integrate the many elements of building a next generation career model
    - leverage funds to create a systemic and sustainable process of shared leadership

- This investment directly addresses Strategy 3: Building statewide support systems.

School District Collaboration Grants

# Strategy 3 Outcomes:

- **Key Outcome on Achievement Compacts:**
  - 3rd Grade Reading Proficiency
  - 5th Grade Math Proficiency
  - 6th Grade Not Chronically Absent
  - 8th Grade Math Proficiency
  - 9th Grade Credits Earned
  - 9th Grade Not Chronically Absent
  - 4 Year Graduation Rate
  - 5 Year Completion Rate

- **Annual data used to measure improvement would include:**
  - Student outcome data
  - Teacher retention and satisfaction with professional development
- **A substantial investment would support:** Oregon could reach 40-40-20 almost three years earlier than the current goal. SDCF districts move students to proficiency on state tests faster than the statewide average.

# Strategy 3 Equity Considerations:

School District Collaboration Grants

- **How will strategy improve outcomes for underserved and at risk populations?**
  - CLASS districts close the achievement gaps between traditionally underperforming student groups and the rest of Oregon students.
- **What evidence do you have strategy will be successful?**
  - Strong evidence linking collaboration in School District Collaboration Fund districts to improved student outcomes. Movement of students towards proficiency on state tests
- **How does strategy align to Equity Lens?**
  - **We believe** in the importance of supporting great teaching. Research is clear that “teachers are among the most powerful influences in (student) learning.

# Strategy Four

Educator Preparation

- Strategy 3: Educator Preparation
  - Continued district/university educator preparation partnerships
  - Educator recruitment and retention projects targeting Oregon's Minority Teacher Act goals,
  - Maintenance of a statewide recruitment website

- This investment directly addresses Strategy 3: Building statewide support systems.

# Strategy 4 Outcomes:

- **Key Outcome on Achievement Compacts:**
  - Student learning outcomes on the Achievement Compacts are dependent to a great degree on teachers.
- **Annual data used to measure improvement would include:**
  - # and % of teacher candidates graduating from Oregon educator preparation programs who are culturally and linguistically diverse
  - Employer satisfaction rates with newly hired educators prepared in Oregon programs.
- **A substantial investment would support:**
  - Expansion of new models of teacher preparation, creation of strong leadership pipeline, and significant improvements in recruitment & retention of minority educators

# Strategy 4 Equity Considerations:

Educator Preparation

- **How will strategy improve outcomes for underserved and at risk populations?**
  - "Grow your Own" and Early Cadet programs are an important part of a recruitment strategy that will develop educators who are grounded in their communities and committed to long-term careers in schools.
- **What evidence do you have strategy will be successful?**
  - Studies of effective educator preparation programs point repeatedly to the powerful learning that occurs when candidates learn to teach or lead in well-designed and carefully-selected clinical settings under the direct guidance of expert practitioners while taking coursework that is practice-focused and tightly aligned.
- **How does strategy align to Equity Lens?**
  - **We believe** in the importance of supporting great teaching. Research is clear that “teachers are among the most powerful influences in (student) learning.

# Strategy 4 Other Considerations:

Additional focus is also needed to strengthen administrator preparation programs to ensure that graduates can:

1. Coach and facilitate strong classroom instruction and use of culturally responsive practices,
2. Plan and support effective models of professional development based on teacher needs, and
3. Provide strong leadership that result in improved student outcomes.

# Strategy Five

- Strategy 5:Culturally Responsive Teaching Pedagogy and Practices
  - Expanding and replicating culturally responsive teaching practices already shown to:
    1. Improve student achievement for Oregon's students of color and second language, and
    2. Combat the impact of poverty on students' success in school

- This investment directly addresses Strategy 3: Building statewide support systems.

# Strategy 5 Outcomes:

- **Key Outcome on Achievement Compacts:**
  - 3rd Grade Reading Proficiency
  - 5th Grade Math Proficiency
  - 6th Grade Not Chronically Absent
  - 8th Grade Math Proficiency
  - 9th Grade Credits Earned
  - 9th Grade Not Chronically Absent
  - 4 Year and 5 year Graduation Rate
- **Annual data used to measure improvement would include:**
  - Achievement gaps between populations of students
  - TELL Survey items
- **A substantial investment would support:** Closing of the achievement gap and resulting improvements statewide to key student outcomes such as 3rd grade reading & graduation

# Strategy 5 Equity Considerations:

Culturally Responsive Teaching Practices

- **How will strategy improve outcomes for underserved and at risk populations?**
  - Student learning outcomes on the Achievement Compacts are dependent to a great degree on teachers.

- **What evidence do you have strategy will be successful?**
  - Professional Development--A 2009 meta-analysis on the effects of teacher professional development on improvement of student learning showed that professional development for teachers can result in changes in teacher behavior and student achievement when the PD is characterized by collective participation, when continuing learning reinforcement activities are offered after the initial period of teacher training, and when there is extensive use of strategies including coaching, mentoring, internship, professional networks, and study groups (Blank & de las Alas, 2009).

- **How does strategy align to Equity Lens?**
  - **We believe** that intentional and proven practices must be implemented to return out of school youth to the appropriate educational setting. We recognize that this will require us to challenge and change our current educational setting to be more culturally responsive, safe, and responsive to the significant number of elementary, middle, and high school students who are currently out of school.

# Strategy 5 Other Considerations:

In addition to OEIB identified metrics, more extensive use of the Tripod Survey (Ferguson, 2009) as an outcome measure during the 2015-17 biennium would provide a sustainable means of measuring impacts of Network investments on students' school experiences.

Oregon Education Investment Board

# OUTCOMES & INVESTMENTS SUBCOMITTEE
# 2015-17 BUDGET RECOMMENDATIONS

> *"You can't improve a school's performance or the performance of any teacher or student in it, without increasing the investment in teachers' knowledge, pedagogical skills, and understanding of students. This work can be influenced by an external accountability system, but it cannot be done [solely] by that system…Test-based accountability without substantial investments in capacity–internal accountability and instructional improvement in schools–is unlikely to elicit better performance from low-performing students and schools."*
>
> *Richard Elmore, Senior Research Fellow Consortium for Policy Research in Education*

With the passage of HB 3233, the 2013 Legislature established the Network of Quality Teaching and Learning and provided $45 M in funds for a comprehensive system of support for educators to create a culture of leadership, professionalism, continuous improvement and excellence for teachers and leaders across the P-20 system. Furthermore, HB 2506 stipulated that roughly $33 M be transferred biennially from the State School Fund to the Network of Quality Teaching and Learning. These actions clearly reflect Oregon's policymakers' priorities for investing in the education profession to impact student achievement.

The Oregon Department of Education (ODE) was directed to support the network, disseminate best practices and distribute grant and contract funds to school districts, community colleges, post-secondary institutions, providers of early learning services and nonprofit organizations. With an aggressive timeline for distribution, the ODE has awarded close to 100% of the strategic investment funds as of June 2014.

The Oregon Education Investment Board (OEIB) was directed to support the network and establish accountability systems for the network. A Network Advisory made up of educators, Oregon Education Association representatives, representatives from the Chalkboard Project, the Confederation of Oregon School Administrators (COSA), a legislator and other experts in teacher and leader development have been assisting ODE and OEIB in:

- Promoting the scaling up of the most effective practices through the Network,
- Developing infrastructure needed to maximize the network (e.g. portal),
- Elevating educators' role in shaping and contributing to the Network,
- Linking the Network to other community-based efforts such as Regional

Achievement Collaboratives, Early Learning Hubs, and STEM Networks, and
- Developing stronger connections between the Network and postsecondary partners preparing educators and conducting research on related issues.

Mapping of HB3233 and HB 3232 investments by districts can be better understood via an interactive map now on the ODE website.

Feedback from stakeholders affirms that it is still too early to gauge the full impact of the Network investments on educator quality and ultimately student outcomes. They have emphasized the need to "stay the course" with the work that is still getting underway. They support continued tracking of progress, expansion and scaling up of effective practices shown to make a difference for students, and more investments in time for teachers to implement what works.

Based on feedback from a number of stakeholders and from results of the first statewide survey of teaching conditions, there are several key priority areas being called out for enhanced funding during the 2015-17 biennium.

1. Full State Access to Mentoring to scale up mentoring to reach 100% of all new teachers and administrators employed in Oregon and ensuring program fidelity based upon the state's mentoring standards
2. Regional Capacity Building to engage educators to plan their local use of Network funds to implement Common Core State Standards and Educator Effectiveness models to improve student outcomes and address needs identified from Teaching, Empowering, Leading and Learning (TELL) survey results and Professional Learning Team (PLT) plans probational
3. Expansion of School District Collaboration grants for districts that can demonstrate readiness for culture shifts and the collaborative building of next generation career models for the professional in their districts
4. Educator Preparation to sustain efforts to strengthen teacher and administrator preparation and to recruit and retain a more culturally and linguistically diverse educator workforce with specific focus on addressing challenges faced by rural and frontier districts
5. Culturally Responsive Teaching Practices to expand and replicate culturally responsive teaching practices already shown to: 1) improve student achievement for Oregon's students of color and second language, and 2) combat the impact of poverty on students' success in school

Key to all of the strategic investments in the Network is further development of a Network website/portal to connect educators and attention to clear and measurable outcomes appropriate to the investments. Each continued investment should include the necessary infrastructure to gather, analyze, and disseminate outcome data and proven practices to support further statewide implementation.

## Strategies 1-4:

**(1) How do the strategies align with the OEIB's 2015-17 Budget Strategies & Priorities? Is the strategy related to repurposing, reallocating or allocating funds differently?**

These investments directly address Strategy 3: Building statewide support systems.

Mentoring
In 2013-15, this was a competitive RFP with 85% of the applicants who requested funds receiving awards. However, many districts, particularly small and rural, did not apply due to the grant process and timeline. In 2015-17, using projections from ODE, COSA, and Oregon School Personnel Association, an increase in funding and reallocation of current funding would enable all remaining unfunded districts to be able to mentor newly hired teachers and administrators. Districts who are funded should be required to provide a match of district funds (to be determined) and all districts would be required to meet standards for high-quality mentoring. (Additional funding and reallocation of funding)

Common Core State Standards (CCSS) and Educator Effectiveness Grants
In 2013-15, each district received funding based on Average Daily Membership to participate in CCSS and Educator Effectiveness implementation. The work on both of these important initiatives is far from over and will need to continue. What lies ahead in the 2015-17 biennium are the tasks of "regionalizing expertise" within regions of the state, scaling up networking efforts, and funding sufficient time needed by teachers and administrators to coach each other's learning, develop and share useful resources, and support continued implementation. Districts will need to continue implementing systems of calibrated observations, feedback for educator growth, and aligned professional learning for all evaluators of educators.
(Continued funding)

School District Collaboration Fund Grants
The School District Collaboration Fund grants, which have strong evidence of improving student outcomes, need continued funding to expand a proven practice to new districts that are interested and show a readiness for implementation. The nature of the work undertaken by participating districts provides them the opportunity to align and integrate the many elements of building a next generation career model, leveraging funds to create a systemic and sustainable process of shared leadership. This work also helps build the expertise needed for the regionalization described below that is necessary to build a statewide system of supports.

Educator Preparation
In 2013-15, $1 million was awarded to two additional projects to strengthen collaboration between educator preparation programs and partnering school districts. This work is showing great promise and warrants continued funding.

During the 2013-15 biennium, the Network also supported: 1) recruitment and retention of culturally and linguistically diverse educators, 2) hiring/retention data systems, and 3) professional development for Educator Preparation Programs (EPP) on the TSPC adopted national Teacher Performance Assessment (edTPA) and high leverage CCSS teaching practices.

For the 2015-17 biennium, funds are still needed for continued district/university educator preparation activities as well as educator recruitment and retention projects targeting Oregon's Minority Teacher Act goals and maintenance of a statewide

recruitment website. However, some of the Educator Preparation funds could be reallocated to support efforts to strengthen administrator preparation, including development of a cadre of "turnaround leaders" for focus and priority schools, and to support implementation of English Learner standards for all new educator programs. Some funding should also be designed for rural and remote districts' access to build retention supports for educators of color. (Reallocating funding)

Additional focus is also needed to strengthen administrator preparation programs to ensure that graduates can: 1) coach and facilitate strong classroom instruction and use of culturally responsive practices, 2) plan and support effective models of professional development based on teacher needs, and 3) provide strong leadership that result in improved student outcomes. Specifically, school building leaders must be able to develop a learning organization focused on the needs of all students, create strong relationships with parents and communities, address inequities, facilitate high expectations for all personnel, and manage change. (Additional funding)

Culturally Responsive Practices

Teachers not only need a thorough knowledge of the content areas they teach and how to align instruction to CCSS, they also need to know how children learn so they can design a productive curriculum that builds on students' strengths, prior knowledge and experiences. They need to know how to adapt instruction for the needs of English language learners and students with special needs; how to assess learning continuously so they can diagnose students' needs and respond with effective teaching strategies; and how to work collectively with parents and colleagues to improve student outcomes.[1]

During the 2013-15 biennium the Network supported a number of initiatives focused on closing the achievement gap. What was lacking were Oregon-specific examples of culturally responsive practices that have resulted in improved student outcomes and engagement of students typically underserved. Using outcome measures that include attendance, 3rd grade literacy, 9th grade on track, achievement scores, and graduation from schools serving high percentages of students of color, second language learners and student from poverty backgrounds, the investments in 2015-17 should focus on identifying specific culturally responsive practices that have shown improvement in student outcomes. These should become the guiding criteria for supporting other schools to improve practice and be eligible for additional funding to turn around their outcomes.

### (2) How will the strategy lead to improvement on the key outcomes identified by the OEIB, such as those identified in Achievement Compact or early learning hub requirements?

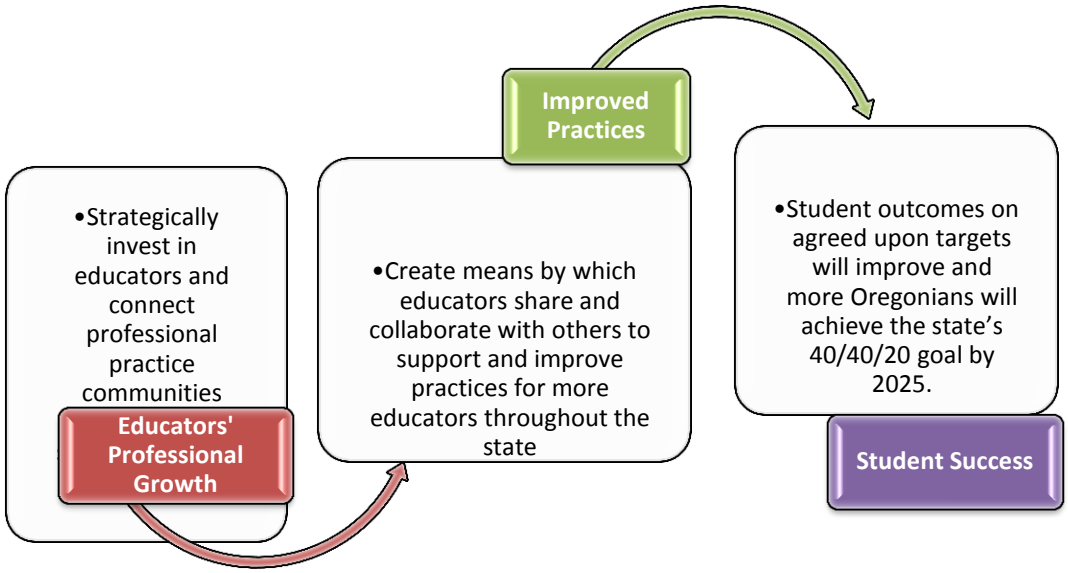
The OEIB scorecard includes two specific educator outcomes: 1) increase in non-white, Hispanic or non-Native English educators and 2) increased educator satisfaction with professional support. A third outcome being monitored this biennium includes 3) employer satisfaction rates with newly hired educators prepared in Oregon programs. All

[1] L. Darling-Hammond. (2012). *Supporting Educator Quality in Oregon.* A report commissioned by Governor John Kitzhaber and the Oregon Education Investment Board.

three of these outcomes will be retained in the 2015-17 biennium along with key items from the 2014 TELL survey results and the Educator Preparation graduate follow up and employer surveys.

In the 2015-17 biennium, additional outcomes linking investments in educators to student outcomes should be introduced including the use of the TRIPOD survey that gauges perceptions from students about school climate, classroom conditions, teaching qualities, and student engagement.

The initial theory of action undergirding the Network is still applicable:




By creating opportunities and supporting districts in closing opportunity gaps through culturally responsive pedagogy and practices, we ensure educators are able to provide culturally relevant, effective instruction that motivate and engage students who traditionally achieve at lower rates.[2] These opportunities can have a direct effort on increasing academic achievement, retention, and graduation rates of students of color and ultimately closing opportunity gaps for students who are culturally and linguistically diverse in Oregon schools.

**(3) What measurable difference will the strategy make for children, families & students, specifically those who are underserved or put at risk? By when? What metrics will be used to measure improvement?**

In addition to OEIB identified metrics, more extensive use of the Tripod Survey (Ferguson, 2009) as an outcome measure during the 2015-17 biennium would provide a sustainable means of measuring impacts of Network investments on students' school experiences. The MET Project found that *Tripod* surveys are predictive of student achievement gains and are a stable, reliable measure of effective teaching. The Tripod

[2] Geneva Gay. (2001) *Culturally Responsive Teaching: Theory, Research and Practice*

survey has the ability to measure student perceptions in the following areas:

1. Teaching Effectiveness: Measures deliver specific feedback about teaching practices and classroom learning conditions.
2. Student Engagement: Data concerning social and academic engagement indicate how students judge their own attitudes, behaviors and effort in each classroom.
3. Student Satisfaction: Data indicate whether each classroom, building and district is a place where students feel safe, welcome and satisfied with their progress.
4. Whole- school Climate: Data from individual classrooms can be aggregated up to measures of whole school climate. In addition, surveys include questions that pertain to the school as a whole.

### (4) How does this strategy demonstrate the priorities and values expressed in the OEIB equity lens?

Although all four of the strategies connect to the Equity Lens, two strategies have very direct connections to the Equity Lens:

1. Increasing the diversity of Oregon educator workforce
2. Supporting educators' use of culturally responsive pedagogy and teaching practices

### (5) What evidence indicates these strategies will result in improvement?

A 2007 study of 25 of the world's school systems, including ten of the top performers, found that investments in teachers and teaching are central to improving student outcomes. They found that the top school systems emphasize 1) getting the right people to become teachers; 2) developing them into effective instructors and; 3) ensuring that the system is able to deliver the best possible instruction for every child.[3]

Mentoring--Studies show that teachers who receive high-quality induction programs stay in the profession at significantly higher rates, accelerate new teachers' professional growth, and improve student learning. In a review of 15 empirical studies regarding the impact of induction programs, Ingersoll and Strong (2011) describe having a mentor teacher, common planning time with teachers in the same subject, and regularly scheduled collaboration with other teachers as some of the most important features of successful induction.[4] Teacher turnover also contributes to significant loss of student achievement, because of the instability it creates and the revolving door of beginning teachers.

Collaboration—There is strong evidence linking collaboration in School District Collaboration Fund districts to improving student outcomes. CLASS districts continue to move students to proficiency on state tests faster than the rest of the state. CLASS districts also continue the promising result of closing the achievement gaps between traditionally underperforming student groups and the rest of Oregon students.

[3] M. Barber & M. Mourshed (2007). *How the world's best-performing school systems come out on top*. London: McKinsey and Company.

[4] Ingersoll, R. and Strong, M. (2011). The Impact of Induction and Mentoring Programs for Beginning Teachers: A Critical Review of the Research. *Review of Education Research*. Vol. 81(2), 201-233.

Professional Development--A 2009 meta-analysis on the effects of teacher professional development on improvement of student learning showed that professional development for teachers can result in changes in teacher behavior and student achievement when the PD is characterized by collective participation, when continuing learning reinforcement activities are offered after the initial period of teacher training, and when there is extensive use of strategies including coaching, mentoring, internship, professional networks, and study groups (Blank & de las Alas, 2009).

In 2013, Shaha & Ellsworth[5] found that educators learn about what they are most interested in, or most in need of, at the time of interest or need, rather than when it fits sequentially into any prescriptive curriculum. They found that higher levels of utilization, engagement, and active use were correlated with higher student achievement and successes for educators and schools.

Educator Preparation—"Grow your Own" programs are an important part of a recruitment strategy that will develop educators who are grounded in their communities and committed to long-term careers in schools.[6] Studies of effective educator preparation programs point repeatedly to the powerful learning that occurs when candidates learn to teach or lead in well-designed and carefully-selected clinical settings under the direct guidance of expert practitioners while taking coursework that is practice-focused and tightly aligned.[7]

### (6) At various levels of investment (modest, medium, substantial), what will the state be "buying"? What impact will this have on measurable results described above?

| | Modest | Moderate | Substantial |
|---|---|---|---|
| Mentoring | Provide support to a limited number of new teachers & administrators – lower quality, significant risk of lower student outcomes & higher teacher turnover | Continue to provide support to a majority, but not all, new teachers & administrators | Statewide coverage of high-quality mentoring – significant ROI in retention savings |
| Capacity Building Funding for | Slower progress on implementing | Continuation of current progress | Most likely to increase student |

[5] Shaha SH, Ellsworth H (2013). Predictors of Success for Professional Development: Linking Student Achievement to School and Educator Successes through On-Demand, Online Professional Learning. *Journal of Instructional Psychology*. (Accepted for publication Sept, 2013)

[6] E.A. Skinner, M.T. Garreton, B.D. Schultz (2011). *Grow Your Own Teachers: Grassroots Change for Teacher Education. Teaching for Social Justice.* NY: Teachers College Press.

[7] Boyd, D.J., Grossman, P.L., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher Preparation and Student Achievement. *Educational Evaluation and Policy Analysis. 31*(4), 416-440. Retrieved August 7, 2012, from http://epa.sagepub.com/content/31/4/416.short; Darling Hammond, L., Bransford, J., LePage, P., & Hammerness, K. (2007). *Powerful Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. San Francisco: Jossey-Bass; S.L.Davis & L. Darling-Hammond (2012). The Impact of Principal Preparation Programs: What Works and How We Know, Planning and Changing, 41 (1-2); Darling-Hammond, LaPointe et al. (2007)

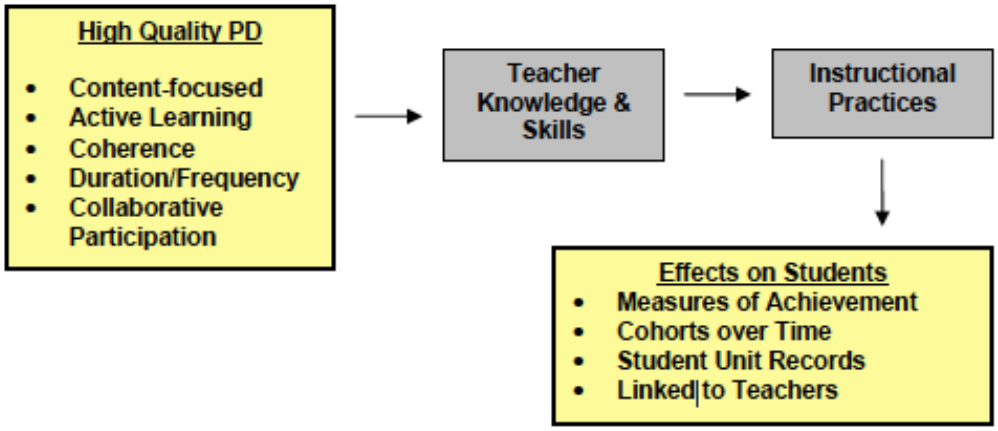
| | | | |
|---|---|---|---|
| Common Core State Standards and Educator Effectiveness | CCSS, high-quality teacher evaluations systems -minimal improvement in student outcomes | implementing CCSS and high-quality teacher evaluation systems -increased teacher & leader effectiveness | learning outcomes as a result of substantial improvements in teacher and leader effectiveness |
| School District Collaboration Fund Grants | Implement in current districts without adding significant numbers of new districts; student achievement gains limited to current districts | Gradually move beyond the current 40% of students in SDCF districts with increased student achievement gain across subgroups and corresponding teacher attitude shifts | If the SDCF were scaled statewide, current student results would support Oregon reaching 40-40-20 almost three years earlier than the current goal. SDCF districts move students to proficiency on state tests faster than the statewide average. |
| Educator Preparation | Potential lack of alignment between school district needs & educator preparation leading to less effective teaching, lack of leadership and increased costs to school districts | Continued progress in transforming teacher preparation progress to produce effective and more diverse cadre of teachers & leaders | Expansion of new models of teacher preparation, creation of strong leadership pipeline, and significant improvements in recruitment & retention of minority educators |
| Culturally Responsive Teaching Practices | Unlikely to improve statewide outcomes as a result of lack of progress for students of color & English language learners | Progress on closing the achievement gap through more effective instruction and engagement of families | Closing of the achievement gap and resulting improvements statewide to key student outcomes such as 3rd grade reading & graduation |

### (7) What other conditions, supports and/or changes are needed for the strategy to be successful?

Professional Development Models The amount of time needed for effective professional development cannot be underestimated. In a meta analysis conducted by Council of Chief State School Officers (CCSSO), 14 of the 18 most effective mathematics and science professional development activities that resulted in improved student

achievement continued for six months or more with a mean contact time with teachers in program activities of 91 hours (Blank & de las Alas, 2009). Figure 2 shows a CCSSO logic model used to evaluate professional development that can guide ongoing research design on the impact of the Network.

Figure 2 Logic Model Used by the Council of Chief State School Officers




For this to occur in Oregon, some school districts will need to re-examine the role of one-day workshops within a full spectrum of a comprehensive professional learning program that includes embedded time for coaching and collaboration.

Teacher Leadership Changes in teacher practices do not occur as a result of top down actions. The changes we need in schools are more likely to occur when teachers are supported in becoming leaders of change and provided with the necessary resources of time and instructional supports. This supports an increased involvement of teacher leaders in shaping, providing, and sharing instructional practices across classrooms and school sites. SDCF grants provide participating districts a locally adaptable process that is specifically designed to address the changes to long-held beliefs needed to enable teachers to become leaders of their peers.

Resources and Access to PD Escalated development and implementation of an accessible Network website/portal will maximize and document impact of the investments. External providers may be able to provide a more nimble platform and interactive tools responsive to educators' needs.

Data and Research Capacity The creation of the Longitudinal Database System will also assist in tracking results and connecting investments in teachers to student outcomes.

### (8) Are there state or federal policy or activities that could impact costs and/or success of strategy? In what ways?

Overly prescriptive and unpredictable federal policy through the ESEA (and through the Department of Education's waiver requirements) continues to present a barrier to

building a system of support for educators that is empowering, authentic and comprehensive. It also continues to impact the ability of the Oregon Department of Education as significant capacity is devoted to monitoring & compliance, as well as the burden of annual submissions to extend or update the state's ESEA waiver.

## PART 2: Describe Conditions, Processes & Partners (No more than 2 pages)

### (1) What do you need from other agencies / boards / groups to enable you to be most effective?

The success of the Network calls upon an unprecedented collaboration among partners and stakeholders including OEIB, ODE, TSPC, COSA, OEA, OSBA, OACTE, OSPA, OPTA, OAESD, the Chalkboard Project, EdNorthwest, and community organizations. Participation from these entities on the Network Advisory and the Coalition for Quality Teaching and Learning are two mechanisms by which collective action can support the intended outcomes of the Network.

### (2) What can your agency / board / group offer to other parts of the system to aid in alignment & transformation?

The Network Advisory will continue to serve in a capacity of:

- Guiding development of Network outcomes
- Providing insights on local Network implementation and connections to other efforts
- Helping scale up effective practices
- Mobilizing the untapped potential of teachers as leaders of innovation
- Helping create efficient and effective use of the resources, and
- Applying known lessons from existing efforts in Oregon and elsewhere

### (3) Which strategies that you know are priorities for other agencies/boards/groups would enable you to achieve your results (better, faster, etc.), if any?

These recommendations mirror needs raised in weekly meetings with the ODE Strategic Investment Leadership Team, priorities outlined by the Oregon TELL Advisory Team, the Chalkboard Project, COSA, OAESD, OEA, and TSPC. Each of these groups are already working on initiatives that align with and can be leveraged to further the impact of these strategies.

### (4) Please identify at least one strategy for reducing costs or repurposing resources in your agency or policy area.

Increasing investments in Oregon's Mentoring program can reduce the cost of teacher turnover, sometimes estimated as high as $40 million a year in Oregon.

### (5) Who are your key partners, stakeholders, and community groups?

A Network Advisory was established with membership that includes school educators, district and ESD administrators, educator preparation programs, as well as staff from OEIB, TSPC, ODE, COSA, OAESD, OEA, OSSA, the Chalkboard Project, Business Education Compact, and community organizations. In addition, data from teachers involved in the Oregon Mentoring project, the CCSS and Ed Effectiveness Professional Learning Teams, and recipients of all Network funded projects provide an ongoing source of input and engagement from various stakeholders.

### (6) What processes were used for public input in developing the strategies?

Interviews were conducted with the majority of Network Advisory members to identify most pressing strategies. Focus meetings were held with OEA members regarding professional development needs. Recommendations were also drawn from the Oregon Coalition for Quality Teaching and Learning monthly meetings. Some of the recommendations were drawn from a yearlong discussion of educator quality engaging members of the OEIB Best Practices and Student Transitions Subcommittee. In addition, the results of the first TELL Survey were used to craft recommendations that further meet the needs of Oregon educators related to professional development and mentoring.

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7/24/14

Dear members of the OEIB Outcomes and Investments Subcommittee,

I have reviewed the online materials for this meeting and have the following two suggestions:

(1) That the Higher Education Coordinating Commission's proposal for outcomes-based allocations formulas include significant additional funding weights for schools of education that graduate students with the skills and credentials to be dual language immersion teachers in Oregon.

(2) That, related to the OEIB Best Practices and Student Transitions Subcommittee's Strategy Two (the Recruitment and Retention of a More Diverse Educator Workforce), additional tuition and stipends be targeted to students preparing to become Spanish dual language immersion teachers.

There is currently a critical shortage of Spanish dual language immersion teachers across Oregon. Without significantly more Spanish dual language immersion teachers Oregon will be unable to close the achievement and graduation gaps for Hispanics and many English-native students will remain monolingual without their desired and needed Spanish bilingual skills. Oregon should not let this happen.

Last week the Portland Public Schools Dual Language Immersion staff told me that several new elementary level Spanish bilingual immersion teacher positions remain unfilled. PPS staff has already made recruiting trips to places like Texas and New Mexico. The current shortage is real. And, according to my suggested Dual Language Immersion expansion plan (See Appendix A), Portland Public Schools will need at least 82 additional Spanish dual language immersion K-5 elementary teachers over the next ten years.

There is a need for a larger number of Spanish dual language immersion teachers in Oregon outside of Portland Public Schools. For examples, Oregon currently has eleven school districts each with more than 1,000 Hispanic students and no Spanish dual language immersion program. See appendix B for a list. And within those eleven school districts, there are fifteen schools each with a majority of Hispanic students and no Spanish dual language immersion program. See Appendix C for list. Plus other school districts with Spanish immersions will seek to expand them.

Long term much more needs to be done to reshape hiring prospects for Spanish dual language immersion teachers. The existing Oregon teacher credentialing and teacher education higher

education systems are outdated. They are failing us. They do not and probably will not produce the dual language immersion teachers or teachers of color that Oregon needs. Currently both the Teachers Standards and Practices Commission and Oregon's system of higher education are more obstacles than aides to developing a twenty-first century educational system. Both the teacher credentialing and the teacher education higher education systems need substantial rethinking and reshaping. I do not know if, how or when this might happen, nor do I even have a clear vision of what reforms are needed.

Thanks you.

Appendix A

| Draft 5 year Dual Language Immersion Expansion Plan Summary | | | |
|---|---|---|---|
| Year | School | Language | Kinders |
| 2015-16 | Peninsula | Neighborhood only Spanish | 25 |
| | Whitman | Neighborhood only Spanish | 25 |
| | Kellogg | Mandarin | 50 |
| | Kellogg | Vietnamese ? Russian | 25 |
| | | | |
| 2016-17 | Kelly | Neighborhood only Spanish | 25 |
| | Faubion | Neighborhood only Spanish | 25 |
| | Smith | Spanish | 50 |
| | Tubman | Japanese | 50 |
| | | | |
| 2017-18 | Rosa Park | Neighborhood only Spanish | 25 |
| | Woodmere | Neighborhood only Spanish | 25 |
| | Humboldt | Spanish | 50 |
| | | | |
| 2018-19 | Woodlawn | Neighborhood only Spanish | 25 |
| | Harrison Park | Neighborhood only Spanish | 25 |
| | Terwilliger | Mandarin | 50 |
| | | | |
| 2019-20 | Marysville | Neighborhood only Spanish | 25 |
| | Astor | Neighborhood only Spanish | 25 |
| | Edwards | To be determined | 50 |
| | | | |
| | Le Monde | French | 25 |
| | | | |
| | Total | | 600 |

Appendix B

| 11 Oregon School Districts<br>With No Spanish immersion programs<br>By numbers of Hispanics: 2013-14 | | |
|---|---|---|
| | Percent Hispanic | Number of Hispanics |
| Reynolds | 38.7% | 4,576 |
| Gresham-Barlow | 25.8% | 3,114 |
| Medford | 22.6% | 3,067 |
| David Douglas | 24.4% | 2,655 |
| McMinnville | 33.1% | 2,187 |
| Hermiston | 47.7% | 2,500 |
| Centennial | 25.2% | 1,552 |
| Central Polk | 43.1% | 1,320 |
| Morrow | 54.8% | 1,161 |
| Milton-Freewater | 55.7% | 1,048 |
| Jefferson County | 34.8% | 1,010 |

Appendix C

| Oregon Elementary Schools by School District<br>2013-14, Oregon Department of Eduction, Rpt. #67<br>> 50% Hispanic | | | | |
|---|---|---|---|---|
| | | Percent Hispanic | Number Hispanic | Total Students |
| Reynolds | | | | |
| | Davis | 58.4% | 281 | 481 |
| | Hartley | 57.0% | 304 | 533 |
| | Woodland | 51.9% | 257 | 495 |
| Gresham-Barlow | | | | |
| | East Gresham | 50.3% | 227 | 451 |
| | Highland | 51.4% | 247 | 481 |
| Medford | | | | |
| | Jackson | 54.9% | 228 | 415 |
| David Douglas | | | | |
| McMinnville | | | | |
| | Sue Buel | 51.6% | 260 | 504 |
| Hermiston | | | | |
| | Sunset | 61.8% | 392 | 624 |
| | West Park | 62.5% | 346 | 554 |
| Centennial | | | | |
| Central Polk | | | | |
| | Ash Creek | 52.3% | 263 | 503 |
| | Independence | 56.9% | 242 | 425 |
| Morrow | | | | |
| | Sam Boardman | 81.6% | 271 | 332 |
| | Windy River | 78.4% | 160 | 204 |
| Milton-Freewater | | | | |
| | Freewater | 67.0% | 191 | 285 |
| | Grove | 67.7% | 199 | 294 |
| Jefferson County | | | | |